15 CENTS A COPY

THE OIL WEEKLY

OIL & GAS ENGINEERING

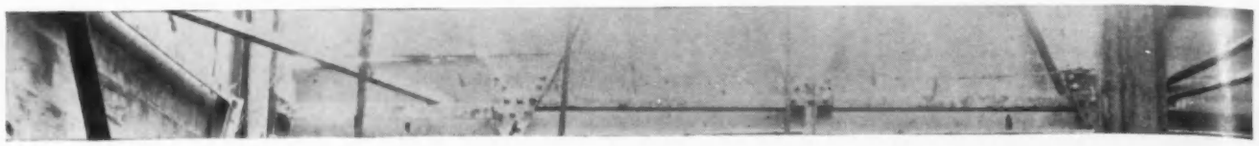
News Statistics

CHAMPION DERRICKS *and*
CHALLENGER ANGLE DERRICKS

May 29, 1931

ADVERTISERS INDEX, LAST PAGE

EDITORIAL INDEX, PAGE 19



Busy Contractors save time with

dependable UNION Rotary Lines

SUCCESSFUL drilling contractors haven't time for any wire lines but those of proven dependability. Busy contractors in all fields have learned that the uniform high quality of UNION Wire Lines insures satisfactory service.

Shown above is Pasadena No. 6 of the I. T. I. O. Co. at Oklahoma City; Schoenfeld and Hunter, Contractors. The men, left to right, are: James A. Undercofler, Union Wire Rope Corp.; T. B. Hunter and D. L. Schoenfeld, contractors; W. L. Kitch, tool pusher; Charlie Rupe, driller; R. O. Webb, pipe-man; C. L. Jones, fireman; Joe Jones, derrickman; and T. Sweetman, derrickman.

UNION WIRE ROPE CORPORATION, 3 N. Madison, Tulsa, Okla.

Oil Country Sales and Export Office:
338 Kennedy Bldg., Tulsa, Oklahoma

Branch Office and Warehouse:
Portland, Oregon

Parker-Abbott, Inc., Distributor,
582 Market St., San Francisco, Calif.

UNION WIRE ROPE CORP
TRADE MARK

Factory: 21st and Manchester,
Kansas City, Missouri

JARECKI MANUFACTURING CO.
Mid-Continent and Eastern Oil Field
Distributors · · · Stocks at All Stores

UNION WIRE LINES

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 3301 Buffalo Drive, Houston, Texas. Subscription price $1.00 per year; 15 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879

The Finest Materials

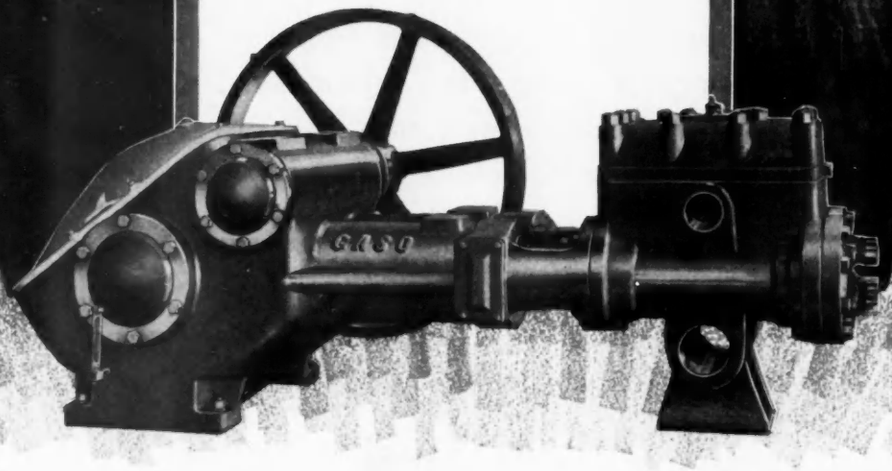
—the Foundation of GASO Pump Economy

Materials for every part of every GASO Pump are painstakingly selected both for suitability and for quality. These finest of materials are the foundation upon which correct design and precision workmanship build the outstanding endurance and economical performance of GASO Pumps.

GASO PUMP & BURNER MFG. CO. - - Tulsa, Okla.

Export Office: New York, N. Y.

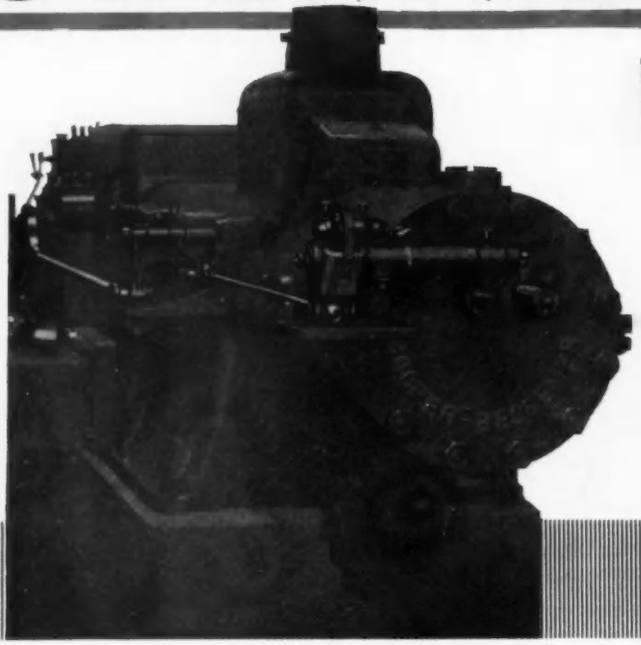
Shown below is GASO Timken Bearing Enclosed Power Pump, Fig. 1508. Interchangeable liners give capacities ranging from 63 bbls. per hour at 800 lbs. working pressure to 250 bbls. per hour at 250 lbs. pressure. Arranged for any type of drive desired.

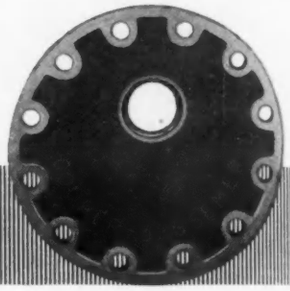


GASO PUMPS

FOR EVERY OIL INDUSTRY NEED

MODERNIZE Your With Co





GENUINE REPLACEMENT PARTS FO

TYPE - 8 (80 B. H. P.)
TYPE - 10 (OLD MODELS)
TYPE - EC (80 B. H. P.)
TYPE - EC (165 B. H. P.)

DO you have any of the earlier model Cooper-Bessemer Types 8, 10 and EC gas engines? By replacing certain parts you can make many of these engines better than when new! Greater horsepower, increased fuel economy and lower maintenance costs can be accomplished.

Several of the leading oil companies are taking advantage of present conditions to carry through this modernizing program. They recognize this opportunity to renew their engines without interfering with operation schedules.

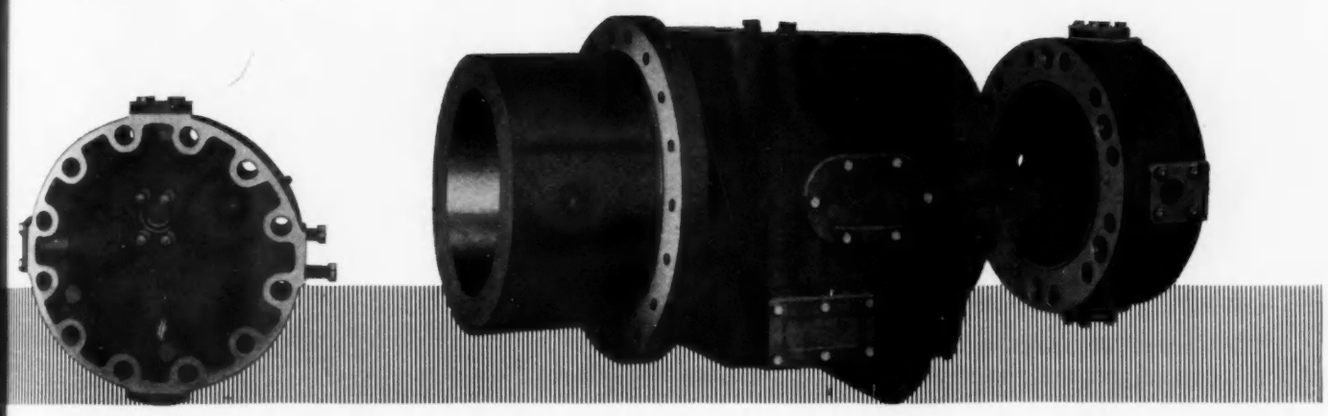
In a few minutes one of our men can give you complete information and prices. Or if you prefer, get in touch with our nearest office and ask for a new folder.

THE COOPER-BESSEMER CORPORATION

MO
201 E
Tulsa,

EARLIER MODELS

oper-Bessemer



R TYPES-8, 10 & EC GAS ENGINES

STEEL CYLINDER HEAD

The new replacement head is a one-piece, alloy-steel casting, so designed that all initial casting strains are avoided. Service records show that it withstands extreme temperature changes without cracking. Cooling is more thorough, and joint leakage is eliminated. Large, removable plate covers entire front.

NEW POWER CYLINDER

The new replacement cylinder has wider exhaust bridges with positive cooling water-circulation. It has increased inlet and exhaust port capacity, better scavenging, better lubrication of exhaust bridges as well as the entire cylinder, and ground finish on the cylinder bore.

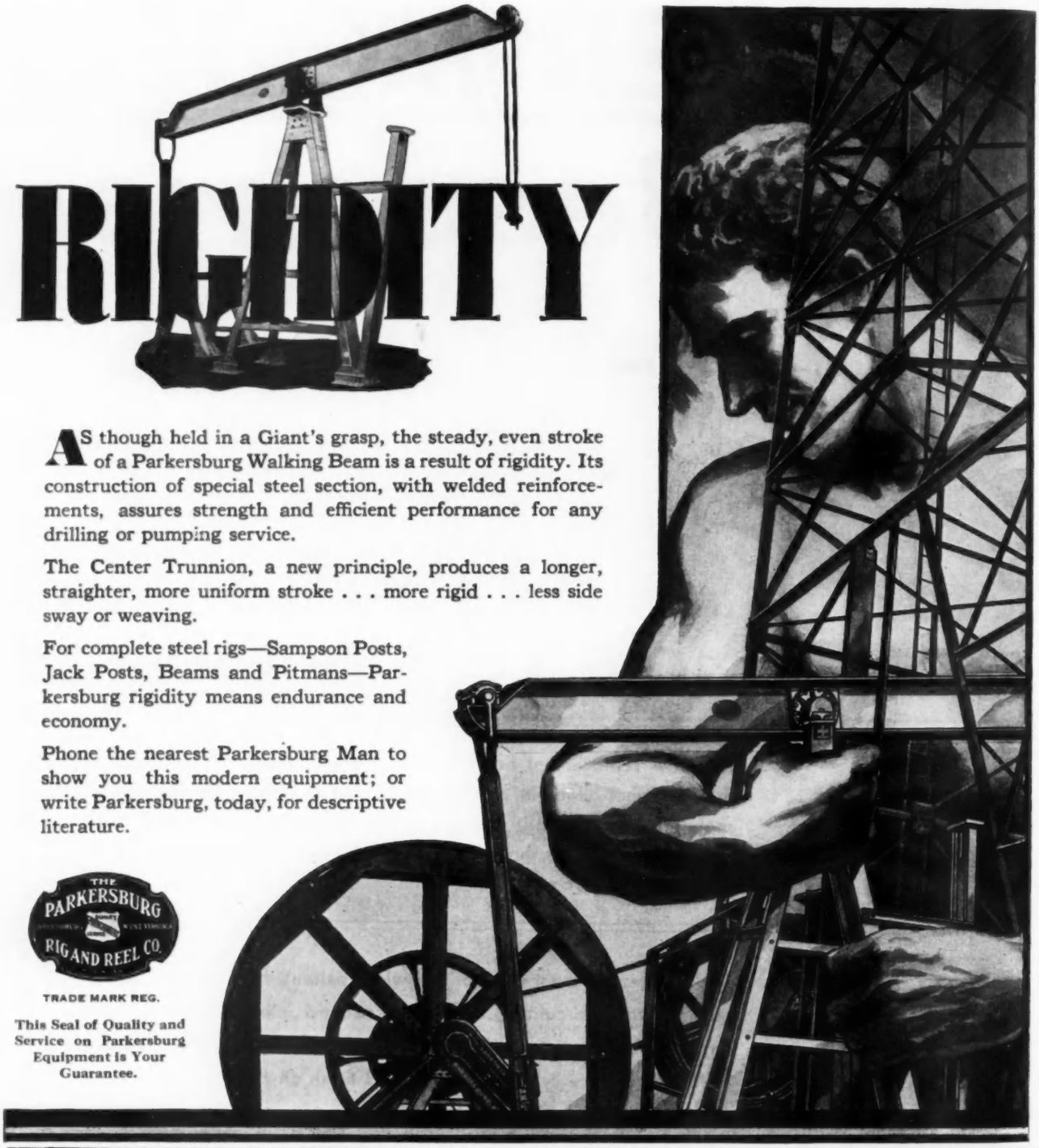
IMPROVED GAS ECONOMIZER

The new improved design gas economizer increases power and decreases fuel consumption. Fuel savings effected by including this device, when modernizing engines, will give fuel economy approaching that of 4-cycle units. Parts are made of special long-lasting materials. Oil cups provide thorough lubrication.

MOUNT VERNON, OHIO
201 E. First Street
Tulsa, Oklahoma
1313 Magnolia Building
Dallas, Texas

GROVE CITY, PENNSYLVANIA
640 E. 61st St.
Los Angeles, California
Suite No. 301, 25 W. 43rd St.
New York, N. Y.

RIGIDITY



AS though held in a Giant's grasp, the steady, even stroke of a Parkersburg Walking Beam is a result of rigidity. Its construction of special steel section, with welded reinforcements, assures strength and efficient performance for any drilling or pumping service.

The Center Trunnion, a new principle, produces a longer, straighter, more uniform stroke . . . more rigid . . . less side sway or weaving.

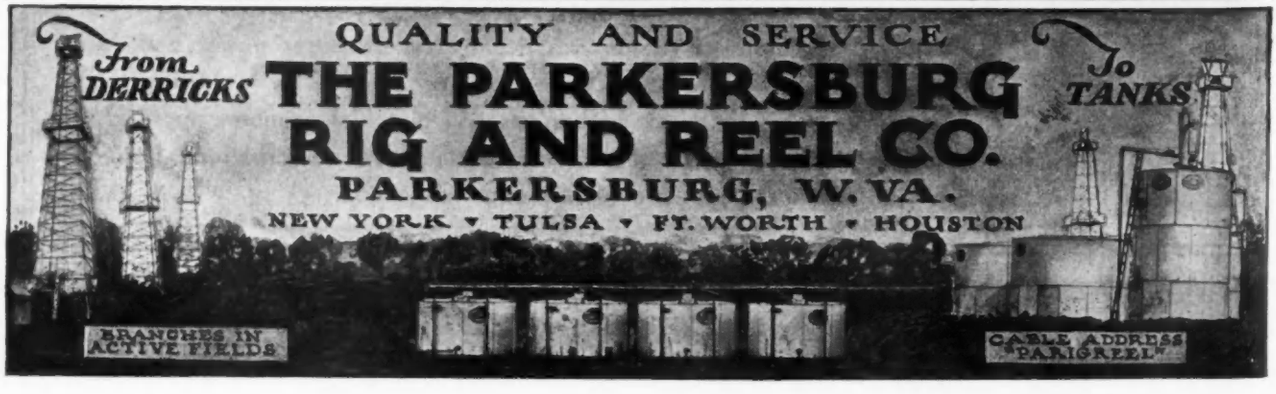
For complete steel rigs—Sampson Posts, Jack Posts, Beams and Pitmans—Parkersburg rigidity means endurance and economy.

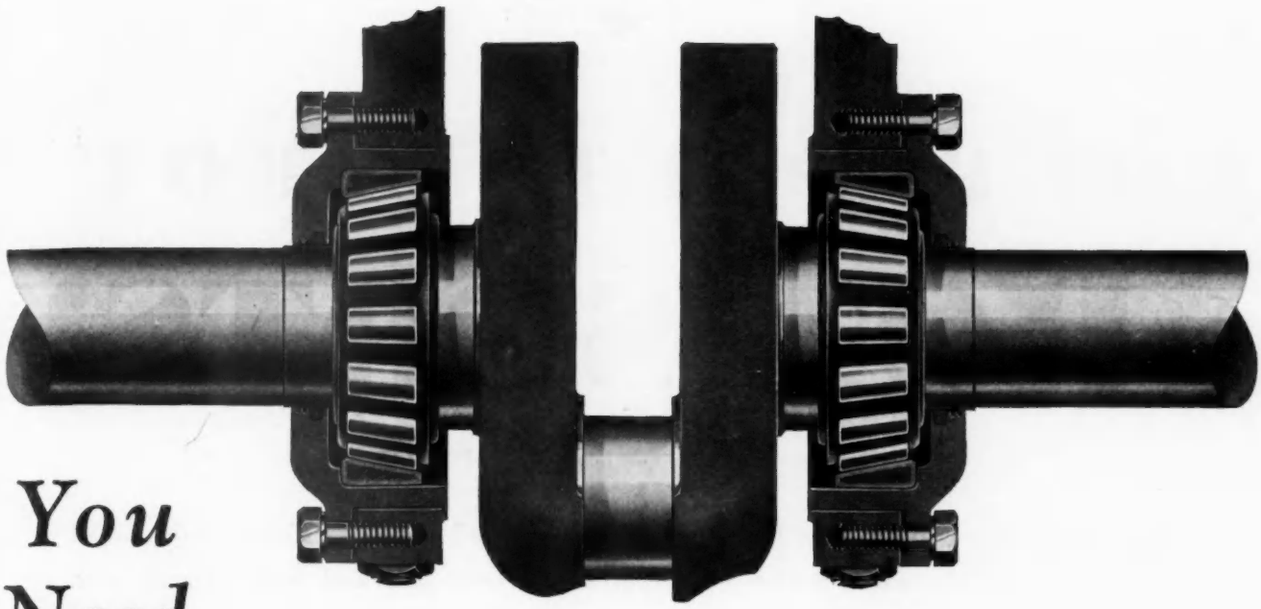
Phone the nearest Parkersburg Man to show you this modern equipment; or write Parkersburg, today, for descriptive literature.

THE PARKERSBURG RIG AND REEL CO.

TRADE MARK REG.

This Seal of Quality and Service on Parkersburg Equipment is Your Guarantee.


QUALITY AND SERVICE
From DERRICKS
THE PARKERSBURG RIG AND REEL CO.
To TANKS
PARKERSBURG, W. VA.
NEW YORK • TULSA • FT. WORTH • HOUSTON
BRANCHES IN ACTIVE FIELDS
CABLE ADDRESS "PARIGREEL"



You Need This Modern Refinement In *YOUR* Engines

With crank shafts mounted in Timken Tapered Roller Bearings, modern engines are delivering more power at the pulley, conserving fuel and saving lubricating oil.

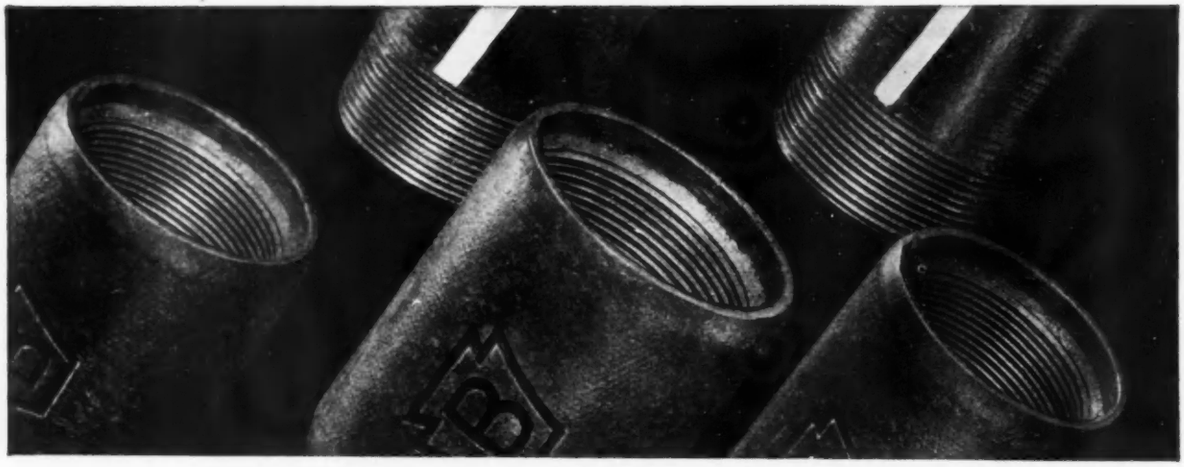
Engine builders have found, too, that they can secure greater dependability and longer life through the use of Timken-equipped crank shafts. Besides eliminating friction, Timken Bearings curb destructive vibration, overcome radial and thrust loads, hold the crank shaft in rigid alignment and prevent whip—thus protecting the connecting rod, piston pin and other vital parts of the mechanism.

When buying engines, either as individual power units or in connection with other machinery, it will pay you to make sure that they have Timken Bearing Equipped crank shafts. The Timken Roller Bearing Company, Canton, Ohio.

TIMKEN *Tapered Roller* **BEARINGS**

COLD FACTS ABOUT "HOT SPOTS"

Superintendents know the high cost of "hot spot" repairs. These "hot spots" are caused by corrosion which varies with different soil and water conditions. The economical solution is to balance pipe life by combining in the same line those kinds of pipe best suited for each condition. This is "pipe prescrip-



BYERS • GENUINE • WROUGHT-IRON PIPE

tion." It is significant, indeed, that pipe line companies troubled least with "hot spots" are the most extensive users of Byers Genuine Wrought-Iron Pipe. The explanation is simple: Byers Genuine Wrought-Iron Pipe is the most corrosion resisting of all commercial line pipe materials. What is your corrosion problem? Our engineers will be glad to discuss it with you. A. M. Byers Company, Pittsburgh, Pa. Established 1864.

AN INVESTMENT - NOT AN OUTLAY

no gas?

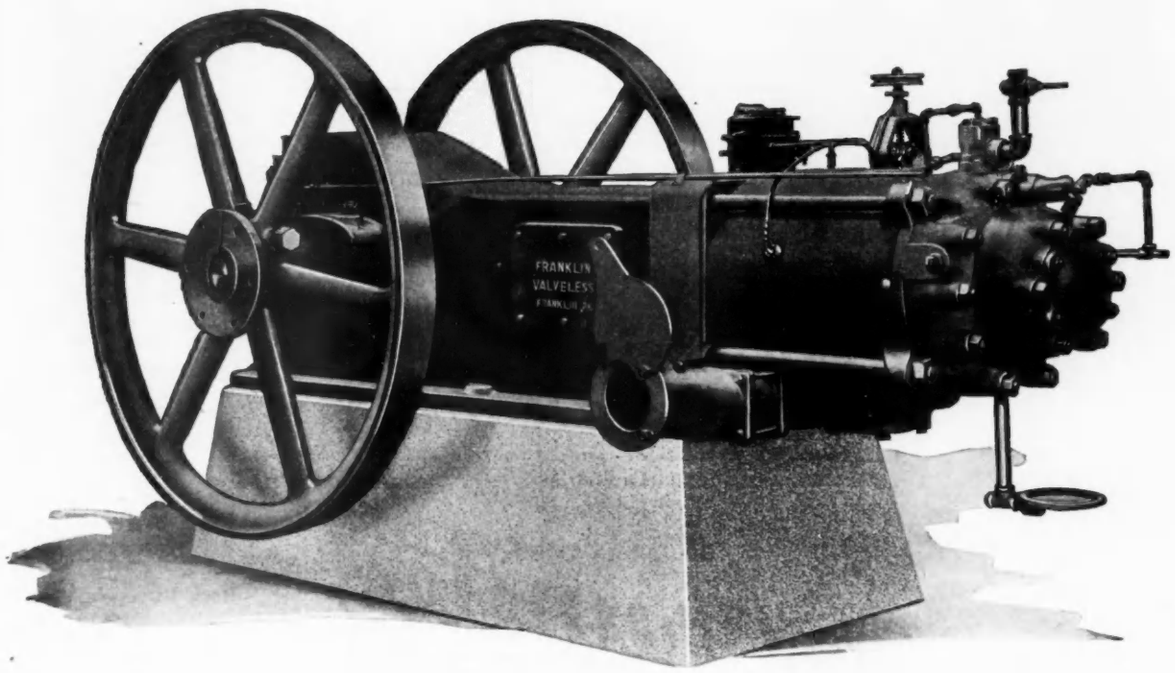
If gas shortage has caused you to use an uneconomic prime mover you can escape, for all time, the penalties of demand charges and a high fuel bill by following the policy of some large producers: Install FRANKLIN VALVELESS O. F. OIL ENGINES—designed and built for oil field loads and tested in all kinds of service—strong, sturdy, simple. Ask us to show you how you can save money by making a change in prime movers—it may save you a lot of money. Now is the time to prune needless expenses.

Don't Worry!

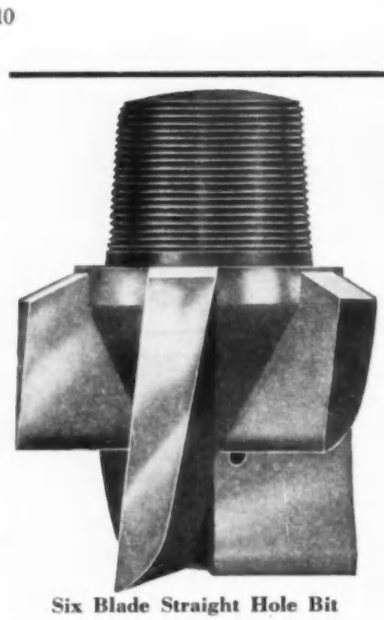
Put the O.F. on your payroll

FRANKLIN VALVELESS ENGINE COMPANY

Franklin, Pennsylvania



Distributed by **OIL WELL SUPPLY COMPANY**



Six Blade Straight Hole Bit

PROFITS

for Contractors

Pat. Pending 438542

End View

Brewster Six-Blade Straight Hole Bits not only do a faster job in all formations while they are down, but eliminate many trips to change bits and always cut a full gauge straight hole. The Brewster Straight Hole Bit is not only the first, but the only bit of its kind. Its patented design, the diamond like hardness of its cutting edge and high degree of skilled workmanship are three reasons.

Fish Tail Bit
Unlocked
Pat. Pending, 487553

ASK THE HUNDREDS OF MEN WHO ARE RUNNING THEM

Your Supply House Carries All Brewster A. P. I. Products

Warehouses: **The Iverson Specialty Co., Oklahoma City, Oklahoma. Phone 2-2833. The Brewster Houston Store, 2000 Harrington Street, Capitol 2031.**

Rock Bit Lock

The Brewster COMPANY~INC.
Shreveport, Louisiana

Now—

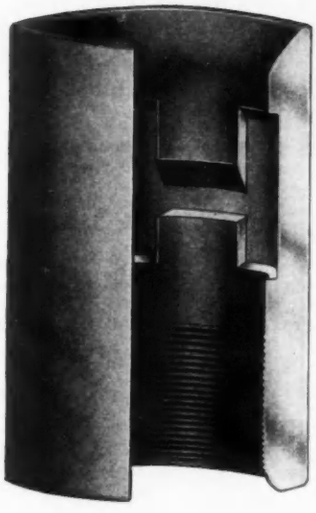
A Ground Liner and Plunger
in an Insert Pump
No Cups — No Packing
No Long Strings of
Tubing to Pull

THE HOPPER INSERT PUMP

A pump unequalled for small producing wells of 200 barrels — especially advantageous for wells making *sand* or *grit*. It saves time and expense — eliminates the cost of pulling tubing — cuts to the minimum the time off production.
Seamless steel plunger, precision ground with liner of alloy casting — a 48 inch stroke.

THE HOPPER
LINER SETTER

Here is a Liner Setter without slots—without holes through the walls of the adapter—that gives a smooth, sure entrance. With packing in the head, it can be set down on the adapter and circulation obtained through the perforations in the pipe below. The bailer and tools can be run through the adapter without injury to the latch mechanism. You can be assured of being able to hook on or off after LONG and HARD SERVICE.



Write Now

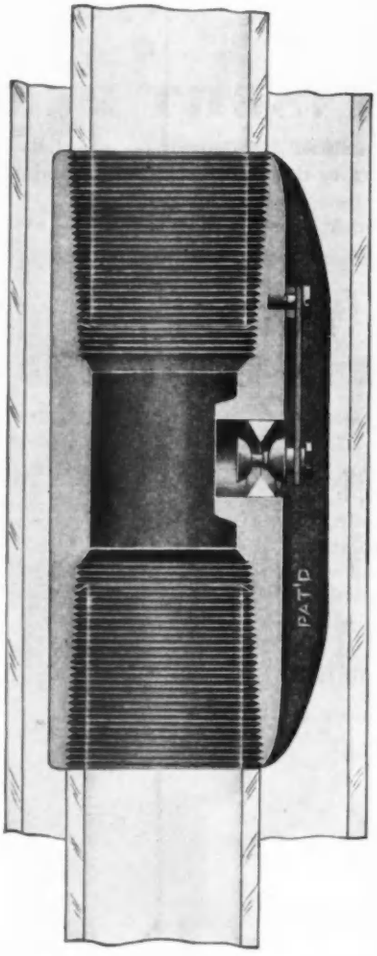
for complete details of these two tools that give SERVICE with LONG LIFE and MINIMUM MAINTENANCE.

HOPPER MACHINE WORKS
INCORPORATED
BAKERSFIELD, CALIFORNIA, U. S. A.
Cable Code: "Hopper"

Positive Starting

The P. & T. Kick-off Unit eliminates the necessity of high pressure compressors, any type compressor that will flow a well, will start it when P. & T. Kick-Off Units are installed with the tubing.

P and T KICK OFF UNIT



On deep wells the time required to start the flow is from 10 minutes to 20 minutes.

Call or write for complete information and prices. The Price & Trawick installation plan includes engineering service and a satisfactory trial period.

Price & Trawick Inc.

STROUD **OKLAHOMA**

NOW . . . The Driller can be Informed of the Slightest Departure of His Drill From the Vertical Path

Sectional view of a SYFO Clinograph. Let down on a wire line or can be dropped into the hole by the "Go-Devil" method.

A SYFO recording sheet giving complete information which may be filed as a permanent record.

Crooked holes mean increased drilling costs . . . greater production costs!

SYFO Clinograph provides the remedy . . . offering an easy, infallible means of determining the degree of deviation without burdensome interruption to drilling.

Leased—not sold . . . it *operates without acids*; is accurate and provides a permanent record on paper for filing.

Write for catalog and quotations, stating conditions and number of wells.

Also makers of the SURWEL Clinograph

SPERRY-SUN WELL SURVEYING CO.

Main Office—1608 Walnut Street
PHILADELPHIA, PA.

Dallas, Texas: 1504 First National Bank Bldg.
Houston, Texas: 1420 Esperson Building
Tulsa, Oklahoma: 402 Petroleum Building
Los Angeles, Calif.: 415 Petroleum Securities Building
Calgary, Alberta, Can.: Room 1, Central Block

The SYFO Clinograph

The biggest economic factor in drilling today

FULLY PATENTED

The lower that prices of Crude drop, the greater the necessity of **BETTIS PROTECTORS**

On ALL your drill pipe ALL the time use genuine Bettis Protectors. In open hole add Bettis Drill Stabilizers. Avoid the dangers if casing breaks; cut the cost of your drilling to the irreducible minimum; triple the life of your drill pipe; save time in drilling. NOW—more than ever before —your wells need Bettis protection.

Patterson-Ballagh Corporation
1900 East 65th Street, Los Angeles

Texas and Gulf Coast Distributors:
BETTIS SALES CO., 917 Merchants & Mfrs. Bldg., Houston

Oklahoma Distributors:
BAILEY & BECKER COMPANY, 210 Tuloma Bldg., Tulsa

New York Office: 39 Cortlandt St.

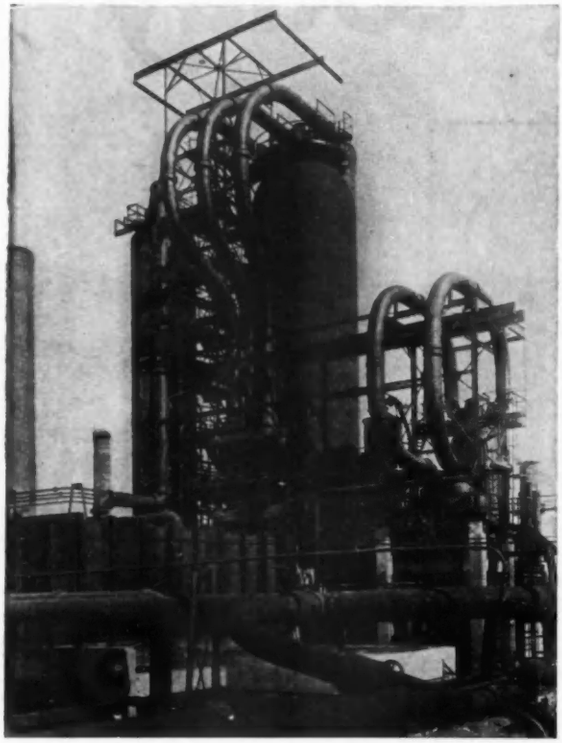
Carried in stock at Los Angeles, Ventura, Kettleman Hills, Bakersfield, Coalinga and Long Beach; California. Tulsa and Oklahoma City; Oklahoma. Houston, Texas. Hobbs, New Mexico. Calgary, Alberta, Canada. New York City.

"Best bet yet!"

AVOID INFERIOR SUBSTITUTES – DEMAND THE GENUINE

GULF

Modern Methods Make Modern Gulf Products



the largest Atmospheric-Vacuum Still ever built.

Paraffine and Coastal Crudes

Gasoline · Lubricating Oils

Naphtha · Gas · Oils

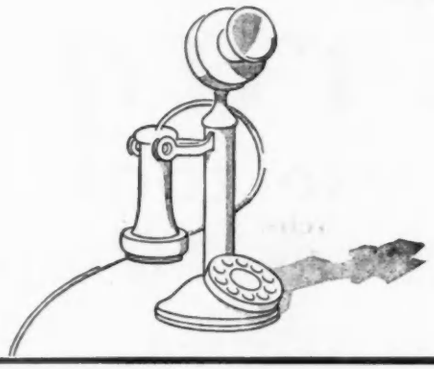
Wax · Petroleum Coke

Cylinder · Engine · Cordage

GULF REFINING COMPANY

General Sales Offices: PITTSBURGH, PA.

MEN WITHIN CALL...



At your elbow—you'll find these men—cut oil wise—trained to know and help you save money when treating cut oil and BS. The answer is the Tret-O-litE Process. Call in the Tret-O-litE man; he's within easy call and your best friend in time of cut oil troubles.

O. L. BASSHAM
116 N. BELLOT ST. ' ' EL DORADO, ARK

S. W. CAMPBELL
840 MILLS ST. ' ' LAKE CHARLES, LA.

D. W. CANFIELD
P. O. BOX No. 472 ' ' JENNINGS, OKLA.

O. F. DUNAFON
328 E. PEAR ST. ' ' WEWOKA, OKLA

D. A. FELL, 3rd.
820 S. OKFUSKEE ST ' WEWOKA, OKLA.

M. J. MULLALLY
1306 CEDAR ST. ' ' DUNCAN, OKLA.

J. D. SANFORD
501 WORLD BLDG. ' ' ' TULSA, OKLA.

W. N. THURSTON
112½ W. 16TH ST., OKLAHOMA CITY, OKLA.

R. A. WATERS
1011 JEFFERSON PLACE, SHAWNEE, OKLA.

W. S. ESTEP
McCONNELL HOTEL ' EL DORADO, KANS.

F. L. KELLEY
4131 E. DOUGLAS ST. ' WICHITA, KANS.

WALTER CURRAN
CENTRAL HOTEL ' ' ' WINK, TEXAS

E. H. DAYVAULT
1906 SPEEDWAY ' WICHITA FALLS, TEX.

F. C. GILBERT
PHONE 113 ' ' ' HENDERSON, TEXAS

H. C. HAMILTON
516 MARINE BANK BLDG., HOUSTON, TEX.

C. G. McCALEB
3441 STANFORD ST. ' ' DALLAS, TEXAS

Q. MABRY
1803 S. HACKBERRY ST., SAN ANTONIO, TEX.

C. C. ROGERS, JR.
611 RIDGEWOOD COURT ' SAN ANTONIO, TEXAS

H. F. SCHRAM
714 W. KANSAS ST. ' MIDLAND, TEXAS

R. L. SENTER
820 E. BROWNING ST. ' PAMPA, TEXAS

J. W. DAVIS
MIDLAND, TEXAS

J. F. THOMAS
305 W. 14th ST. ' ' CASPER, WYOMING

C. W. FORNES
c/o TRETOLITE CO., WEBSTER GROVES, MO.

T. H. HERMAN, JR.
c/o TRETOLITE CO., WEBSTER GROVES, MO.

J. KINKADE
G. W. CAMBLIN
c/o TRETOLITE CO. OF CALIF.
5515 TELEGRAPH RD., LOS ANGELES, CALIF.

TRETOLITE COMPANY
Webster Groves, St. Louis County, Mo.

Tret-O-litE

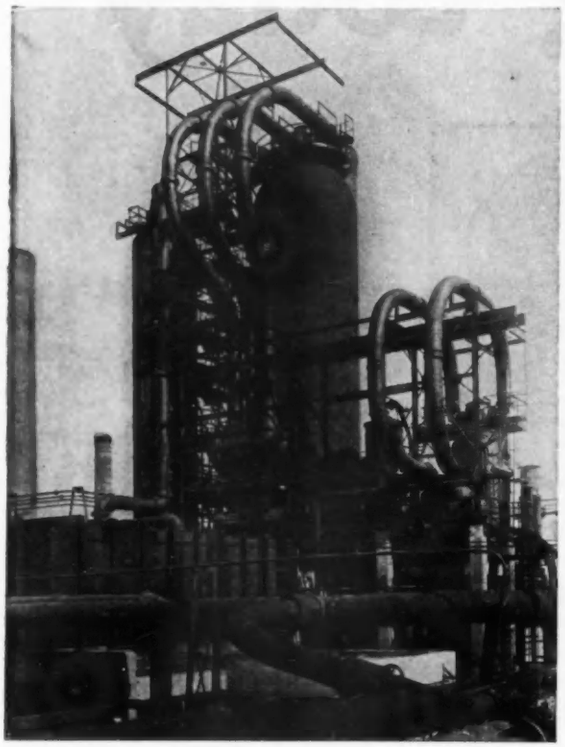
REG. U. S. PAT. OFFICE

OW-5-29-Gray

PROCESS PATENTED

GULF

Modern Methods Make Modern Gulf Products



the largest Atmospheric-Vacuum Still ever built.

Paraffine and Coastal Crudes

Gasoline · Lubricating Oils

Naphtha · Gas · Oils

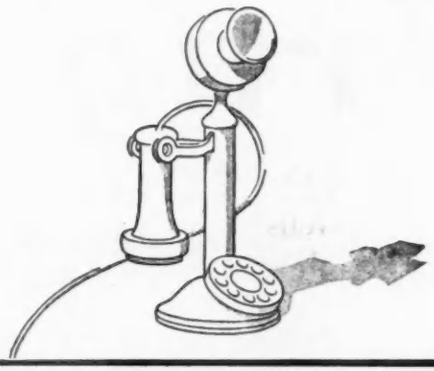
Wax · Petroleum Coke

Cylinder · Engine · Cordage

GULF REFINING COMPANY

General Sales Offices: PITTSBURGH, PA.

MEN WITHIN CALL . . .



At your elbow — you'll find these men — cut oil wise — trained to know and help you save money when treating cut oil and BS. The answer is the Tret-O-litE Process. Call in the Tret-O-litE man; he's within easy call and your best friend in time of cut oil troubles.

O. L. BASSHAM
116 N. BELLOT ST. ′ ′ EL DORADO, ARK

S. W. CAMPBELL
840 MILLS ST. ′ ′ LAKE CHARLES, LA.

D. W. CANFIELD
P. O. BOX No. 472 ′ ′ JENNINGS, OKLA.

O. F. DUNAFON
328 E. PEAR ST. ′ ′ WEWOKA, OKLA

D. A. FELL, 3rd.
820 S. OKFUSKEE ST ′ WEWOKA, OKLA.

M. J. MULLALLY
1306 CEDAR ST. ′ ′ DUNCAN, OKLA.

J. D. SANFORD
501 WORLD BLDG. ′ ′ ′ TULSA, OKLA.

W. N. THURSTON
112½ W. 16TH ST., OKLAHOMA CITY, OKLA.

R. A. WATERS
1011 JEFFERSON PLACE, SHAWNEE, OKLA.

W. S. ESTEP
McCONNELL HOTEL ′ EL DORADO, KANS.

F. L. KELLEY
4131 E. DOUGLAS ST. ′ WICHITA, KANS.

WALTER CURRAN
CENTRAL HOTEL ′ ′ ′ WINK, TEXAS

E. H. DAYVAULT
1906 SPEEDWAY ′ WICHITA FALLS, TEX.

F. C. GILBERT
PHONE 113 ′ ′ ′ HENDERSON, TEXAS

H. C. HAMILTON
516 MARINE BANK BLDG., HOUSTON, TEX.

C. G. McCALEB
3441 STANFORD ST. ′ ′ DALLAS, TEXAS

Q. MABRY
1803 S. HACKBERRY ST., SAN ANTONIO, TEX.

C. C. ROGERS, JR.
611 RIDGEWOOD COURT ′ SAN ANTONIO, TEXAS

H. F. SCHRAM
714 W. KANSAS ST. ′ MIDLAND, TEXAS

R. L. SENTER
820 E. BROWNING ST. ′ PAMPA, TEXAS

J. W. DAVIS
MIDLAND, TEXAS

J. F. THOMAS
305 W. 14th ST. ′ ′ CASPER, WYOMING

C. W. FORNES
c/o TRETOLITE CO., WEBSTER GROVES, MO.

T. H. HERMAN, JR.
c/o TRETOLITE CO., WEBSTER GROVES, MO.

J. KINKADE
G. W. CAMBLIN
c/o TRETOLITE CO. OF CALIF.
5515 TELEGRAPH RD., LOS ANGELES, CALIF.

TRETOLITE COMPANY
Webster Groves, St. Louis County, Mo.

Tret-O-litE

REG. U. S. PAT. OFFICE

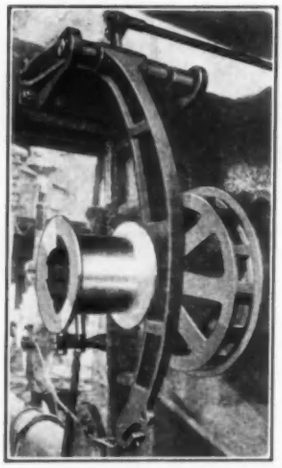
OW-5-29-Gray

PROCESS PATENTED

from *California* to *Iraq*

these tools lead their field

The MacClatchie Automatic Safety Cathead saves time . . . labor . . . money . . . is safer than any other breaking device. It has no clutches, bearings or bushing to get out of order. It especially appeals where low maintenance is desired.



Wherever oil men drill, you will find MacClatchie Specialties. MacClatchie Tools are the result of exhaustive research and field tests and fill real needs in drilling oil wells. The MacClatchie name on a tool is your assurance of Quality—Simplicity and Efficiency.

Write for Illustrated Catalog!

MACCLATCHIE MANUFACTURING CO.

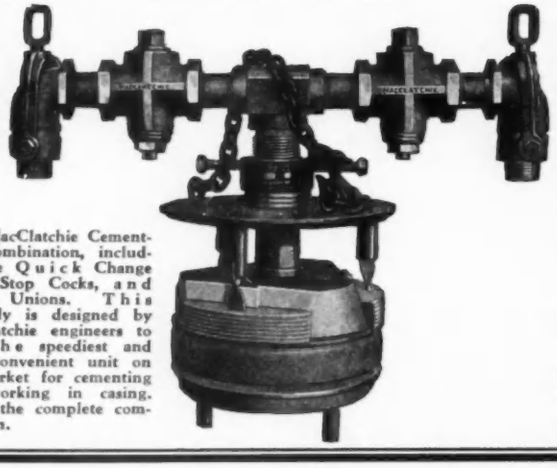
Compton, Calif.

Branches in Houston, Texas; Ventura and Bakersfield, Calif.

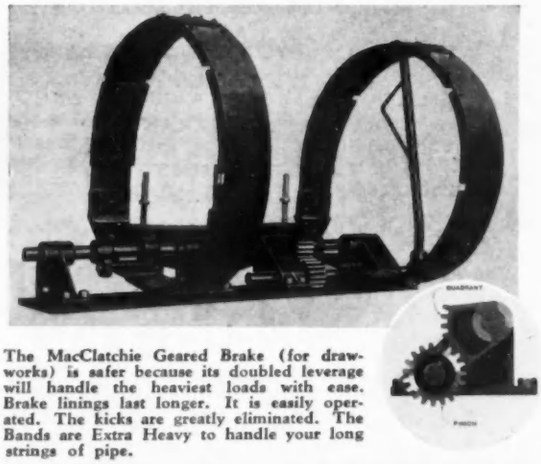
Valves Stocked by all Mid-Continent Continental Supply Stores.

The MacClatchie Mud Pump Valves are made in sizes to fit any mud pump and of the finest special alloys and carefully processed rubber. It has never been successfully imitated. The Largest Selling Valve in the World.

The MacClatchie Rotary Under-reamer combines strength and simplicity of operation to give faster reaming jobs at less expense. Opening and closing of cutters is entirely automatic . . . depending only on rotation.



The MacClatchie Cementing Combination, including the Quick Change Head Stop Cocks, and Quick Unions. This assembly is designed by MacClatchie engineers to give the speediest and most convenient unit on the market for cementing and working in casing. Order the complete combination.



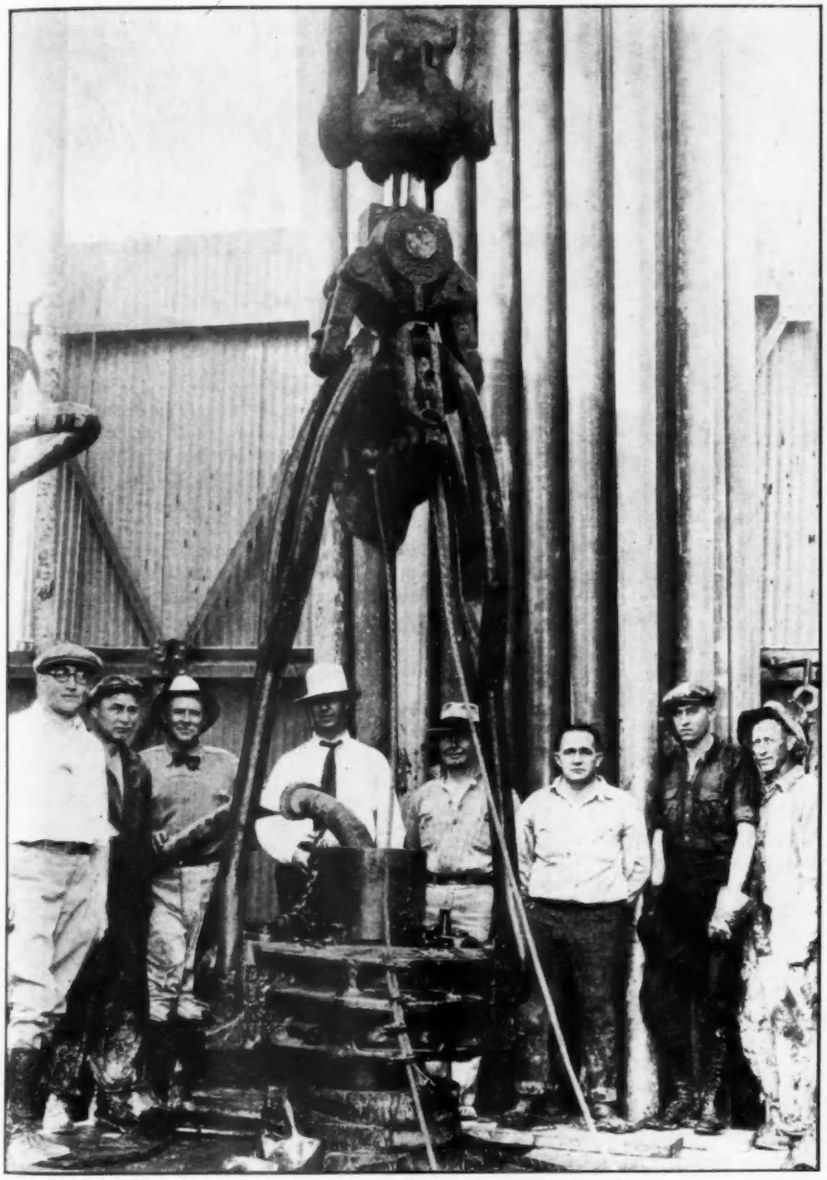
The MacClatchie Geared Brake (for drawworks) is safer because its doubled leverage will handle the heaviest loads with ease. Brake linings last longer. It is easily operated. The kicks are greatly eliminated. The Bands are Extra Heavy to handle your long strings of pipe.

★

Another World's Record . . . and again

American Brakebloks

HANDLED THE LOAD!



★ *The World's Record string of pipe on the North American Consolidated at Kettleman Hills was set under the supervision of Abbey Jenks, Superintendent, and Jack Vaughan, Tool Pusher. This picture, showing filling of casing with mud, was taken when half the pipe was run in.*

American BRAKEBLOKS *do not smoke, burn, squeal or score. They are non-compressible, maintain a constant coefficient of friction and outwear all other oil well brake materials. They do not kick.*

WHEN North American Consolidated set a world's record string of 13⅜-inch pipe . . . 6,766 feet in 16 hours and 45 minutes at Kettleman Hills, Feb. 17-18 . . . the tremendous 460,000-pound load was easily handled by American BRAKEBLOKS.

There you have just another of the long and growing list of astonishing performances by this revolutionary material for oil well brakes. In well after well, American BRAKEBLOKS have proved their vast superiority over woven or molded brake materials—usually saving many hundreds of dollars in equipment and time.

You can depend upon American BRAKEBLOKS to deliver more ton miles of operation and to give uniform braking from grass roots to bottom. This non-compressible material keeps flanges true and smooth. It cannot be softened by heat, and gives off no poisonous smoke.

Write for our very interesting folder, telling all about American BRAKEBLOKS and describing performances on other wells with which you are familiar.

AMERICAN BRAKE MATERIALS CORPORATION
Division of AMERICAN BRAKE SHOE & FDRY. CO.
4660 Merritt Ave., Detroit, Mich., U. S. A.
Sales Offices: Chicago · New York · San Francisco
Export Dept.: 30 Water Street, New York

AMERICAN BRAKEBLOKS
TRADE MARK REG. IN U.S. AND CAN. PAT. OFFS.

STANLEY RESOR

***President*, J. Walter Thompson Company**

"I thought that we had some appreciation of the value of the A. B. C. until we started work in countries where circulations are not audited. It is difficult for anyone in this country to realize what the absence of audited figures means in additional outlay of time, work, and money. In many offices in other countries it has taken our organization literally months of intensive advance work solely on the problems of circulation. Most of the information obtained under these difficulties, had there been an A. B. C., would have been instantly available.

"To these first costs must be added the continuing cost of keeping circulation data up to date.

"I think it can be safely said that the A. B. C. is one of the outstanding successful co-operative undertakings of the generation."

Stanley Resor

GEORGE PEARSON

Director of Media

Chicago Office, J. Walter Thompson Company

"Perhaps only those of us who have been buying advertising space for a time we have to measure in decades, can fully appreciate the great job the A. B. C. has done. And its work is just as necessary now as it ever was in the past.

"I think the current trend of business requires us all to give more detailed study than ever before to actual A. B. C. Audit Reports and Publisher's Statements. To appraise the circulation of a publication intelligently, we must know the distribution, circulation methods, subscription prices and other facts that are reliably shown only in the reports of the Bureau.

Geo Pearson

Would you picture for yourself American advertising as it existed two decades ago? Follow business, then, as it seeks the markets of the world. Survey with men in American advertising agencies, the field of media in Britain, on the Continent, in South America, in the Far East.

There, in circulation claims, chaos still prevails. Expensive research and constant vigilance are needed in buying space. Advertising must surmount a needless hurdle—an obstacle which in this country has been removed forever.

Facing the same conditions under which advertising still struggles in other lands, American advertising sixteen years ago demanded a change. The regulatory force came from within. Advertisers, advertising agencies and publishers joined in founding the Audit Bureau of Circulations.

Everybody today knows the plainly printed reports of the A. B. C. They cover almost every important publication. They are packed with facts which the wise buyer of space takes pains to heed.

Men who seek the last dollar of value in their advertising budgets are not content with figures on paid circulation only. They search out the whole story, as told in the complete A. B. C. reports. And therein they find the gauge to true values in the selection of advertising media, the means to make an appropriation yield the results that modern business demands.

As a recognition of service, not only agencies and publishers, but a distinguished group of advertisers in the United States and Canada, hold membership today in the Audit Bureau of Circulations.

An advertisement by the
AUDIT BUREAU OF CIRCULATIONS
Executive Offices . . . Chicago

IT'S WHAT THEY SAY...

REPUBLIC
ELECTRIC WELD
PIPE

MADE BY A NEW PROCESS
CONTROLLED EXCLUSIVELY BY
REPUBLIC STEEL CORPORATION
YOUNGSTOWN . OHIO . . . . .

Field Crew bending 8-5/8" Republic Electric Weld Pipe . . . Phillips Pipe Line.

Firing Line Welding of five joint sections Republic Electric Weld Pipe . . . Prairie Pipe Line.

Lining up bent section of Republic Electric Weld Pipe . . . Shelly Oil Line.

It's What THEY *Say . . . Not What* WE *Say, that Counts.* Ask any crew that has worked with Republic Electric Weld Pipe how it compares with ordinary line pipe and, out of their experience, this is what you will be told.

Because it is made in long lengths, fewer joints are needed. This means savings in time, in handling, in couplings, in welding, labor and materials. Because it is uniform in thickness and perfectly round, it can be bent with more accuracy, with less spoilage, and joints can be welded with more ease. Because of its perfect welds and high ductility, it is a real trouble saver during the installation period and in actual service.

Republic Electric Weld Pipe, the outstanding recent development in pipe making, is available in sizes up to 16 inch O. D., in lengths up to fifty feet, every length tested and free from scale. Your crews will work better, faster, with this better pipe.

REPUBLIC
ELECTRIC WELD
PIPE

MADE BY A NEW PROCESS
CONTROLLED EXCLUSIVELY BY
REPUBLIC STEEL CORPORATION
YOUNGSTOWN . OHIO . . . . .

REPUBLIC STEEL
CORPORATION
GENERAL OFFICES: YOUNGSTOWN, OHIO

©CIB 116785

JUN -1 1931

THE OIL WEEKLY

MAY 29, 1931
Vol. 61, No. 11

S. W. ROBINSON
Editor

COPYRIGHT, 1931

Published Weekly by
THE GULF PUBLISHING COMPANY
HOUSTON, TEXAS

CONTENTS

Special Features

Underselling in East Texas Forces Lower Prices 21
By H. J. Struth

Division of Cost and Profit in Unit Operation 22
By Robert W. Phelps

This Method of Re-Casing Wells Safe and Not Too Costly 27
By J. C. Albright

Instrument for Measuring Corrosive Properties of Soil 30
By E. R. Shepard

Floating Power Plant Meets Coast Swamp Conditions 34

Union Sulphur Company Sets New Gulf Coast Depth Record ... 36
By W. C. Morris

Regular Departments

Advertisers' Index 98
International Petroleum in Review 71
Markets-Production-Crude Prices 43
United States Production Estimates 46
Crude Oil Price Quotations 49
Oil and Gas Pipe Line Activities 56
Personal Mention 54
Completions for Past Week in All U. S. Fields 73
Permits for New Wells 75
Wildcat Drilling Reports from All Important Areas 77
News from California Fields 57
Oklahoma-Kansas Field Notes 59
Gulf Coast Field Developments 68
East Central Texas Fields 62
South Texas Field Developments 66
Louisiana-Arkansas Development Notes 69
New Mexico and Rocky Mountain Area 58
Mississippi Notes 70
New Equipment, Catalogs, Bulletins, Books 93
Manufacturer and Supply Dealer Notes 96
Squeaks from the Bull Wheel 97

SPECIALIZED OIL JOURNALS
Published by
THE GULF PUBLISHING COMPANY

R. L. DUDLEY, *President*
A. L. BURNS, *Gen'l Manager*
S. W. ROBINSON, *Editorial Director*
J. KENT RIDLEY, *Managing Editor*

NEW YORK: Room 324, 250 Park Avenue, Dick Swinsky, Manager.

PITTSBURGH: 703 Park Building, W. W. Pigue, Manager.

CHICAGO: Room 810, 624 Michigan Avenue, O. R. Waller, Manager.

LOS ANGELES: 416-417 Haas Building, W. E. Green, Manager.

TULSA: 913-916 Hunt Building, J. F. Carter, Jr., Manager.

FORT WORTH: 203 W. T. Waggoner Building, H. H. King, Manager.

Issued Friday of each week. Single copies 15 cents. Subscription price: Domestic $1.00 a year, Foreign $1.00 a year. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879. Subscription restricted to those engaged in the producing and pipe line branches of the oil business or the manufacture and distribution of oil field supplies. Advertising rates on application.

IT'S FROM "OILWELL"

WALL PACKERS THAT PACK

Get these EXCLUSIVE FEATURES

1. **Malleable Iron Cage—substantial one-piece body; no welds.**
2. **Dovetailed Hinged Slips—non-fouling; expand on cone with minimum strain on cage and slips; machined for maximum wall contact.**
3. **"Spring Steel" Friction Springs—set in recesses to prevent twisting off.**
4. **Tapered "V" Hook-makes rehooking easy and positive.**

You get patented designs, new National Tube Company pipe, and special materials in "Oilwell" Packers. Choice of 40 Types, 500 Sizes.

Secure Bulletin No. 104

OIL WELL SUPPLY CO.

Branch Stores in all Oil Fields

SUBSIDIARY OF UNITED STATES STEEL CORPORATION

1549

"OILWELL"

THE OIL WEEKLY

VOLUME 61, NO. 11 MAY 29, 1931

Underselling in East Texas Forces Lower Prices

By H. J. STRUTH
Staff Economist

AS a result of continued over-production which persistently has been sold at less than posted prices, Humble Oil & Refining Company, on May 26, initiated a cut in East Texas crude amounting to about 30 cents per barrel. This brings the posted price of East Texas crude down to but 25 cents a barrel for 35 gravity and below and posts a maximum price of 37 cents on crude of 40 gravity and above. Crude of 36 gravity, which formerly carried a posted price of 59 cents, the same as Oklahoma, Kansas and North Texas, is now quoted at 29 cents. In explaining the reason for this action, Humble Oil & Refining Company stated that despite the fact that the allowable production in East Texas had been fixed at 160,000 barrels daily, actual production was being maintained in excess of 300,000 barrels daily. It was also pointed out by W. S. Farish, president of the company, that approximately 220,000 barrels of East Texas crude was being sold every day at prices below the posted price and that more than 150,000 barrels daily was moving from this field at 35 cents a barrel and below.

It is seen from the foregoing statement that failure to adhere to the prescribed limit of 160,000 barrels, which was the higher figure proposed by a majority of East Texas operators, crude oil being marketed there is sustaining a financial loss to the operators themselves of approximately $6,313 a day. This figure represents the difference between selling 160,000 barrels of East Texas oil at an average of 59 cents a barrel and selling current actual output of 303,750 barrels daily at only 29 cents a barrel. The former rate of production, at 59 cents a barrel, would bring a revenue of $94,400 a day, while the present, much higher, rate of production at 29 cents a barrel only brings a revenue of $88,087 a day. The net loss on a monthly basis represents a total of $189,390, whereas on an annual basis, the loss in revenue, as a direct result of failure to abide by proration limits, rolls up a total of $2,304,245.

Far Reaching Effect

The price cut in East Texas is perhaps of more far-reaching influence than may be at first realized. The fact that several large purchasing companies have only recently adopted the Mid-Continent scale of prices for East Texas crude, combined with the fact that the demand for oil in other districts of Texas, Oklahoma and Kansas has lately shown marked improvement, made it appear that the psychological effect would impart a strengthening market situation to the East Texas area. The fact that more than 200,000 barrels of East Texas oil has been going into market channels at prices considerably below the official market quotations implies that operators in East Texas have not been seriously concerned with the economic situation. In selling the bulk of their oil at cut prices, East Texas operators have not only brought a substantial financial loss upon themselves but have also forced upon operators in all other Mid-Continent producing districts the alternative of accepting less money for their oil.

Sinclair Texas Pipe Line Company, Magnolia Petroleum Company, Gulf Pipe Line Company, Texas Pipe Line Company, Arkansas Pipe Line Corporation and Atlas Pipe Line Company met the price reduction in East Texas, effective on the same date announced by Humble Oil & Refining Company.

Although the demand for crude has shown material improvement in recent weeks, practically eliminating price-cutting in fields outside of East Texas, it is seen that the willingness of East Texas operators to accept minimum prices for their oil will have a tendency to divert purchases from other areas to East Texas, unless the other areas are also willing to accept lower prices. It all resolves itself to an economic battle in which only the fittest and financially strongest will survive. Cutting the price of crude to such figures as prevail in East Texas is to invite a more widespread practice of dumping cheap gasoline upon the market. Since the price of gasoline has been a major factor in the crude market, it is apparent that the ability of gasoline price-cutters to obtain cheap crude will not aid the general market situation. In fact, it is indicated that, on the basis of present valuations of gasoline and crude, it may be possible for a large number of skimming plants to place gasoline on the market at a wholesale price of somewhat less than two cents a gallon. What this will mean to the general oil market is not difficult to foresee.

(*Continued on page 50*)

Division *of* Cost *and* Profit *in* Unit Operation

By ROBERT W. PHELPS
Consulting Petroleum Engineer, Brea, California

THERE is a tendency for the various industries to be operated in larger units as our civilization develops. Economists recognize that the larger corporations are able to operate more cheaply than the smaller, granting that equal intelligence governs the management in each.

The development of unit control of an oil field is a natural trend toward greater efficiency. Great strides have been made in this direction in California. The greatest advance has been made in Kettleman Hills. This attempt, while awkward, is a distinct advancement to better development and operation of an oil field. If the progress of unit control is to continue it will be imperative that a sound and just means of shearing the costs, profits and control of operations be developed. Vague penalties must be eliminated.

Oil fields are developed by the oil companies for only one reason, and that is the profit they will derive by the evpenditures of their capital. A group of operators who are willing to pool their lands will individually expect to receive monetary returns in proportion to the possibilities of their properties. It is of no consequence what area there is in a parcel of land. It is how much profit can be derived out of that lease that fixes its value as an oil producer. It is patent that two properties of equal acreage, one situated on the top of the dome, the other down the flanks near edge water conditions do not have equal possibilities of profits. The division of the spoils should be in ratio with the relative value of each parcel of land.

The division of the control should be in ratio to the relative development, or drilling costs of each parcel of land. In other words, the operator should have control in proportion to the capital he furnishes. It is obvious that capital invested in the development of wells located near the outer edges of a field will not have as lucrative returns as that invested in wells located in the most favorable area.

The development and production of a structure should be done on a geological, engineering and economic basis, without regard to property lines. Therefore it would appear that if unit control is to reach its highest efficiency, all operators must pool their leases, development, production, control and capital for development. A great deal has been written about the advantages of unit control. There will be no need of touching on that phase. A great deal has been said, that has not been published, by those who have felt that they were forced into the unit control to their disadvantage. Whether or not there is any just cause for complaint will not be debated here. There will be many new fields found and it is the object of this paper to give an outline of a proposed plan of unit control. In order to present the plan with clarity and under conditions as practical as possible, a fictitious field will be discussed. It will be impossible to deal with all the possibilities, but an attempt will be made to hit the high spots and unfold the basis for unit control of an oil field. In order to avoid confusion, the mathematics involved will be held in the background.

An Example

Let us assume that the Discover Oil Company drilled a prospect well in Section 10 on the top of the Perfect Dome Hills, situated in any producing state. A great deal of coring was necessary, making the cost of the well a little over $100,000. The well penetrated, with the core bit, 250 feet of oil sands. An analysis of these sands indicated an average porosity, including saturation, of 20 per cent, or a total of 380,000 barrels per acre. The well was completed January 1, 1931, with an initial daily production of 5000 barrels of 25 gravity oil and ten million cubic feet of gas per day. The oil has a value of $1.00 per barrel at the well, and the gas and associated gasoline added another $0.05 per barrel, making a total worth per barrel of $1.05. Six months later this well showed a natural decline to 3000 barrels, the gas-oil ratio remaining about the same. During this interval the well produced 713,000 barrels, indicating that its ultimate production would be 5,470,000 barrels. Up to this time no other wells had been completed, consequently the decline of Discovery No. 1 was free from interfering wells, and its future production was calculated on that basis. The future production, 5,470,000 barrels as calculated, will be depressed as wells in the vicinity are placed on production.

Six months after the Discovery Well No. 1 started to flow, the Yankee Oil Company in Section 4, penetrated the top of the oil zone 4400 feet below sea-level, which was 400 feet lower than the top of the zone in the Discovery well. The Yankee well was able to penetrate only 100 feet of oil sand on account of edge water conditions, which they successfully plugged off. The initial daily production was 2000 barrels of the same character of oil as that produced from the Discovery well. This well cost $80,000 to complete.

A week later the Edjer Oil Company in their Well No. 1 in Section 20 found the top of the oil zone and edge water at the same depths as the Yankee. Both of these wells found the oil zone conformable with the structure as exposed at the surface. Several geologists were able to construct independently a contour map of the oil zone with a high degree of similarity. Figure 1 shows the map and Figure 2 is a cross section through the dome depicting the structure, oil accumulation and edge water conditions. The map and cross section show that the possibilities of oil production do not extend beyond the 4500 foot contour, and the properties that are within that area.

Let us suppose that these three wells have intensified the interest to such an extent that intensive, competitive cut-throat drilling campaign was about to begin. How-

FIGURE 1

Map of Perfect Dome Hills, a fictitious oil field, contoured on the top of the oil sands, and showing the locations of the properties of the several etherical operators

ever, a meeting of the operators was held with the object of perfecting a unit control for the Perfect Dome Field. The status of the properties held by the several operators within the proven and semi-proven area, that is, within the 4500 foot contour, is shown in Table No. 1.

Company	Section	Acreage Proven and Semi-Proven
Discovery	10	640
"	11	320
"	15	320
"	16	160
"	17	160
Total		1600
Edjer	2	240
"	3	310
"	8	326
"	14	170
"	15	278
"	17	310
"	20	266
"	21	243
Total		2143
Howard	9	160
"	11	303
"	17	160
Total		623
National	9	480
William	16	480
Yankee	4	147
Total		5473

TABLE 1

A tabulation of the proven and semi-proven properties in Perfect Dome Field.

A study of the contour map showing the holdings of the various operators in relation to the structure and a glance at Table No. 2 shows that an injustice would be obvious if the division should be made entirely upon the acreage held by each company. Surely the 1600 acres in the cream of the field held by the Discovery Oil Company will not be worth less than the 2143 acres on the edges of

A recapitulation of the holding of the several operators is shown in Table No. 2.

Company	Acreage Proven and Semi-Proven	Royalty
Discovery	1600	1/8
Edjer	2143	1/6
Howard	623	1/5
National	475	1/5
William	480	None
Yankee	147	1/5
Total	5468	

TABLE 2

A tabulation of the total proven and semi-proven holdings of the several operators and the royalties each must pay to the land owner.

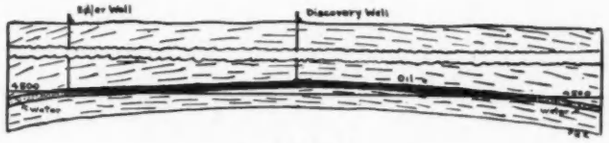


FIGURE 2

A geological section through the Perfect Dome Hills, showing the location of the discovery well on top of the dome, and the Edjer's well which could not take full penetration of the sand on account of edge water

production held by Edjer Oil Company. This point cannot be stressed too far, because it is the foundation of most of the justified expressions of dissatisfaction. It was agreed among the operators to turn over this problem to an engineer to solve. This engineer must be familiar with oil accumulations, oil and gas drainage, well spacing, economics and organization. Such an engineer requires more than a conversational acquaintance with the subject in hand. He must know the mathematical basis underlying his problem, otherwise he will prove worse than useless. The engineer chosen attacked the problem in the following manner.

A study of the contour map, thickness of the oil sands in each well, and their porosities permitted a map to be constructed that showed the distribution of the oil in the

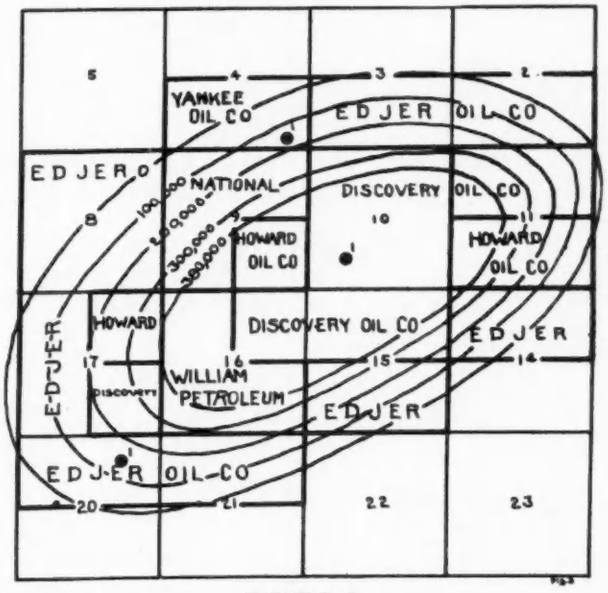


FIGURE 3

A map of Perfect Dome Hills, showing the distribution of the oil in terms of barrels per acre. The properties lying within the 380,000 oval contain that estimated number of barrels of oil per acre before production began

field in terms of barrels per acre. (See Figure 3). It was estimated that there was 380,000 barrels per acre in the area where the full 250 feet of oil saturated sands could be penetrated. This quantity of oil tapered to zero as the 4500 foot contour was reached.

It is not to be construed that this map shows the amount of oil that can be recovered. It is the estimated amount of oil underground and its distribution under the Perfect Dome Hills.

Distribution of Underground Values

The value of a barrel of oil and its associated gases was fixed at $1.05, based on current prices at the well. The maximum underground value per acre would then be the product of 380,000 and $1.05, or approximately $400,000 per acre. These values taper to zero as the 4500 foot contour is reached. Figure 4 shows this distribution of underground values.

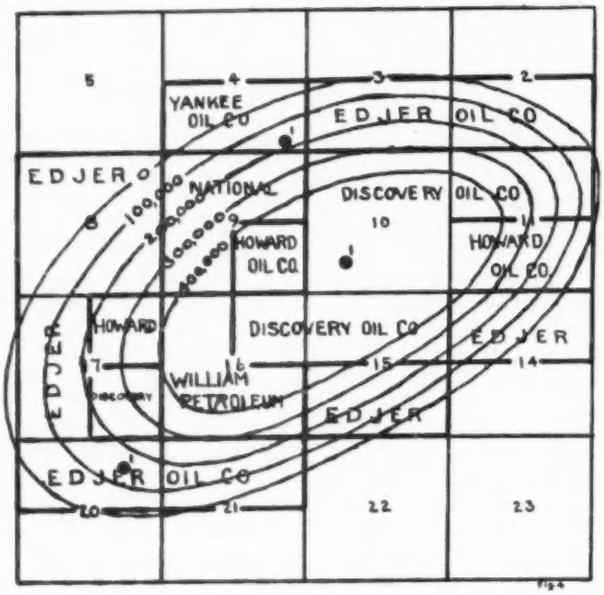


FIGURE 4

A map of Perfect Dome Hills showing the distribution of oil in terms of dollars per acre. The properties lying within the 400,000 oval contain that estimated value of oil per acre before production began

It is not to be construed that these values, nor that the map, indicates the profit per acre. These values do not include drilling and lifting costs nor interest while waiting for production. They are the surface values of the underground oil and associated gases.

Drilling Costs

The three wells completed indicated that the future wells could be completed for $75.000. This sum will be uniformly used for all the wells to avoid unnecessary computations to illustrate the problem.

Distribution of Wells

It is an acknowledged fact that the closer wells are spaced the greater the recovery of oil per acre. The relation of recovery with different well spacing depends upon the drainage factor of the field as of some period in its production. The drainage factor and its correlative economic factor varies broadly for different fields and zones. There is sufficient data in the Perfect Dome Field to determine the well spacing. The three factors, namely, the distribution of the underground oil values, the cost of drilling each well, and the economic drainage factor are now available.

The optimum spacing in the Perfect Dome Field where

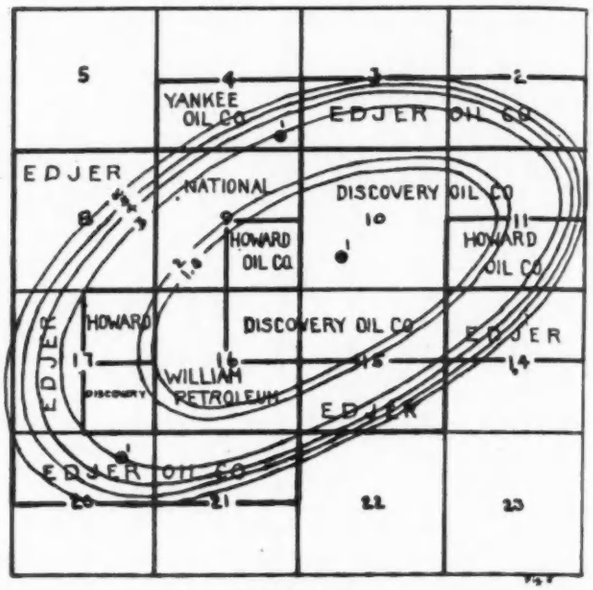


FIGURE 5

A map of Perfect Dome Hills showing the distribution of wells on an optimum basis in terms of acres per well. The properties within the 1.8 oval should have 1.8 acres per well. The number of acres per well increase as the edges of the field are approached

full penetration can be taken is 1.8 acres per well. Optimum spacing can be defined as that spacing or area allotted to each well that will give the maximum profit per acre during the life of the field. The number of acres to the well increases rapidly as the 4500 foot contour is approached, that is, as the value per acre of the underground oil decreases. Figure 5 is a map showing the distribution of the number of acres per well, to obtain the maximum return per acre. The most practical spacing on conservative lines will be discussed later.

Distribution of Drilling Costs

The drilling costs per acre will depend upon the cost of drilling each well, which has been fixed at $75,000, and the number of acres allotted to the well. In the area where 1.8 acres to the well is the optimum spacing, the

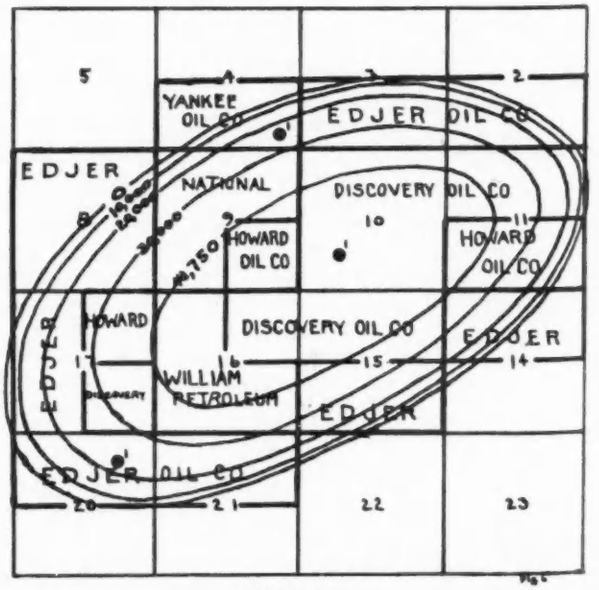


FIGURE 6

A map of Perfect Dome Hills showing the cost of drilling per acre on an optimum spacing basis

average cost per acre will be approximately $41,750 per acre. This diminishes to zero as the 4500 foot contour is reached, that is, as an infinite number of acres per well is reached. Figure 6 is a map that shows how the optimum drilling costs are distributed per acre.

Distribution of Profits

Distribution of profits is materially effected by the royalties imposed by the land owners. In this field the cost of drilling is so small in relation to the value of the underground oil that it has very little effect on the spacing of the wells, except at the extreme outer edge of the producing area. The profits are the gross income from the sale of oil, taken in this problem at $1.05 per barrel, minus 20 cents for lifting, less royalty, less the cost of drilling. Present worth brought from a future value is discounted at a six per cent rate.

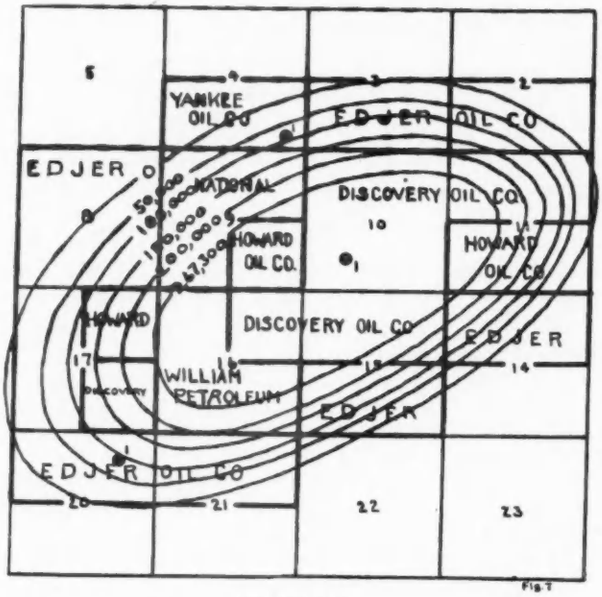


FIGURE 7

A map of Perfect Dome Hills showing the distribution of estimated net profits per acre based on optimum spacing. The properties within the 267,300 oval can be expected to have a return of that sum per acre after deducting lifting costs, drilling costs and discounting the future production to a present value

The optimum profit on leases paying one-eighth royalty is $267,300 per acre where full penetration of the oil sands can be taken. This diminishes to zero before the 4500 contour is reached. Figure 7 is a map showing how the estimated profits on a one-eighth royalty basis is distributed over the field.

Conservative Spacing

It is not recommended that spacing of the wells be upon an optimum basis. By using a safety factor of 2.22, that is, by more than doubling the area allotted to each well on an optimum basis, will cut down the profits only about 10 per cent.

In other words, by more than doubling the area for each well, 90 per cent of the optimum profit per acre can be expected in this field. The practical spacing would then be four acres to the well where full penetration of the sands can be taken, and tapering to an infinite number acres to the well at the 4500-foot contour. A profit of $240,000 per acre could then be expected where full penetration of the oil sands can be taken, taapering to zero inside the 4500-foot contour. A study of Table 3 shows the optimum and conservative number of wells on each parcel of land and the average acreage per well.

Company	Sec.	Acreage proven and semi-proven	Optimum No. of wells	Conservative No. of wells	Average acres per well
Discovery	10	640	348	157	4.1
"	11	320	111	50	6.4
"	15	320	170	76	4.2
"	16	160	89	40	4.0
"	17	160	64	29	5.5
Total	..	1600	782	352	4.55
Edjer	2	240	42	19	12.6
"	3	310	89	40	7.8
"	8	326	58	26	12.5
"	14	170	42	19	9.0
"	15	278	87	39	7.1
"	17	310	65	10	10.5
"	20	266	44	20	13.3
"	21	243	69	31	7.8
Total	..	2143	496	224	9.6
Howard	9	160	89	40	4.0
"	11	303	64	29	10.5
"	17	160	64	29	5.5
Total	..	623	217	98	6.4
National	9	480	192	87	5.5
William	16	480	253	114	4.2
Yankee	4	147	24	11	13.4

TABLE 3.

A tabulation of the several holdings, semi-proven and proven acreage, optimum and conservative number of wells, and average acreage per well for each parcel of land.

The several parcels of land are tabulated in Table 4 with their respective proven and semi-proven acreage, royalty, estimated optimum profits and estimated profits based on the conservative drilling program. This tabulation vividly brings out the properties with the greatest probable profits.

Company	Sec.	Acreage proven and semi-proven	Royalty	Estimated profit optimum spacing	Estimated profit conservative spacing
Discovery	10	640	1/8	$164,800,000	$148,500,000
"	11	320	1/8	47,955,000	43,100,000
"	15	320	1/8	80,260,000	72,200,000
"	16	160	1/8	42,800,000	38,500,000
"	17	160	1/8	27,150,000	24,400,000
Total	..	1600	...	362,965,000	326,700,000
Edjer	2	240	1/6	9,256,000	8,330,000
"	3	310	1/6	25,750,000	23,180,000
"	8	326	1/6	16,170,000	14,540,000
"	14	170	1/6	16,790,000	15,120,000
"	15	278	1/6	17,580,000	15,910,000
"	17	310	1/6	13,040,000	11,740,000
"	20	266	1/6	12,080,000	10,880,000
"	21	243	1/6	18,020,000	16,230,000
Total	..	2143	...	128,686,000	115,900,000
Howard	9	160	1/5	37,000,000	33,300,000
"	11	303	1/5	33,480,000	30,100,000
"	17	160	1/5	25,490,000	22,900,000
Total	..	623	...	95,970,000	86,300,000
National	9	480	1/5	78,150,000	70,000,000
William	16	480	None	146,100,000	131,700,000
Yankee	4	147	1/5	4,460,000	4,000,000
Total	..	5473	...	816,331,000	734,600,000

TABLE 4.

A tabulation of the several parcels of land showing the proven and semi-proven acreages, royalties, estimated optimum and conservative profits.

We now have developed the drilling costs and estimated

profits based on conservative well spacing for each parcel of land held by the several operators. In Table 5 there is a tabulation of the several operators showing the planned number of wells, drilling costs, per cent of these costs to the total development of the field, the estimated profits, and their per cent of the total estimated profits of the field. This tabulation will be basis for the relative amount of capital and control of voting shares of the proposed corporation and the division of profits.

Company	No. of wells to be drilled	Development costs	Per cent of costs	Estimated profits	Per cent of profits
Discovery	352	$26,400,000	39.7	$326,700,000	44.50
Edjer	224	16,800,000	25.3	115,900,000	15.78
Howard	98	7,350,000	11.1	86,300,000	11.75
National	87	6,525,000	9.8	70,000,000	9.53
William	114	8,550,000	12.9	131,700,000	17.92
Yankee	11	825,000	1.2	4,000,000	.54
Total	886	66,450,000	100.0	734,600,000	100.00

TABLE 5.

A tabulation of the several operators showing the relative amounts of capital each must furnish during the drilling campaign and the estimated profits each can expect during the life of the field.

The Organization

The Perfect Dome Hills Corporation was formed. The common stock was divided into two classes, namely "A" and "B". "A" common was issued to and paid for by the several operators in relation to the percentage or drilling costs that was allotted to their respective parcels of land. This stock is the controlling or voting stock in the corporation. The "B" stock is non-voting and shares alike in profits with the "A" stock. The amount of "B" stock issued to each operator gratis is such that the percentage of "A and B" stock held is the same as the percentage of the estimated total profits of the field. The stock is transferable only upon disposition of the properties. The legal phases of the issuing and transferring of the stock can be worked out by a stockholders agreement. Table 6 shows the distribution of stock to the several operators.

Company	"A" stock voting shares	"B" stock non-voting shares	Total shares
Discovery	264,000	3,003,000	3,267,000
Edjer	168,000	991,000	1,159,000
Howard	73,500	789,500	863,000
National	65,250	634,750	700,000
William	85,500	1,231,500	1,317,000
Yankee	8,250	31,750	40,000
Total	664,500	6,681,500	7,346,000

TABLE 6.

A tabulation showing the disposition of stock to the several operators.

It can readily be seen that the several operators can now derive the maximum safe profits with no unnecessary development costs.

Land Owner's Royalties

Aligning all of the operators into unit control is not the only obstacle that confronts the organizers. In these days of curtailed production it is necessary to obtain the signatures of the land owners on the dotted line. Drilling and production clauses must be revised if the field is to be developed and produced under the most efficient methods. The land owner should not expect his property to be drilled with an excessive number of wells. He should expect to get his share of the royalties; no more, no less.

The royalties should be paid directly to the land-owner on the estimated amount of oil the wells allotted to his property will produce in relation to the total amount of oil the field will produce during its life. In other words, the individual land-owner is to receive the same royalty rate he originally made with his lessee, but the amount of oil expected from his property is given a relative percentage in relation to the total oil estimated to be produced during the life of production, based on economic development. His lease then becomes a community lease and his royalties begin with the production of the field.

Operation

With the total field unified then development can be prosecuted for the maximum benefit of all. If it is found necessary to hold in abeyance the issuing of some of the stock to any operators in semi-proven territory, development should favor the proving up of these properties.

The superfluous gas can then be returned most beneficially to the oil sands, increasing the production, lowering lifting costs and increasing the profits.

The Effect of New Zones

It is not likely that the operators on the top of the structure would be willing to gamble that any new zones subsequently discovered will have the same relation of costs and profits as the one now in the process of delevolpment. Should new zones be discovered, then new stock, both voting and non-voting could be issued to those within its production area, using the same fundamental principles to arrive at costs and profits.

Disposition of Production

The smaller operators hesitate in placing in the hands of the major companies the producing policies of their properties. It is natural for the small producer to produce and dispose of his crude oil as rapidly as is physically possible. At present the marketing companies do not want to take the oil faster than its refined products will be absorbed by the ultimate consumer. There should be a definite agreement in regard to the production policies of the field. How the production is to be distributed to the major pipe line carriers is of minor consequence to the small operator, just so long as he is assured that the maximum amount allowed under any enforced curtailment program is moved.

Conclusions

An equitable division of control and division of profits must be based on the capital invested and the profits expected to be derived. This requires a study and analysis of the geological aspects, oil and gas accumulation, drainage factors, economic factors and development costs. Millions of dollars have been lost in many fields due to the lack of an understanding of the basic economic and engineering features that govern the spacing of oil wells. This subject is very little understood by engineers. Some fields require very close spacing of the wells to obtain a high percentage of the optimum profit. A splendid example of such a field is in the Meyer Zone of Santa Fe Springs, California. In the thickest portion of this rich zone the conservative spacing should be .66 acres per well, the optimum being .33. Repressuring is not a cure-all for spacing. It will greatly increase the profits of such a field, but widens the spacing very little. In contrast with the Meyer Zone is in the lower zone of the Playa del Rey field in Venice, California. Here the drainage factor is large and the accumulation is so sparse per acre that the conservative spacing should be from six to eight acres per well, the optimum being between three and four acres. Kettleman Hills requires a greater spacing of any field observed. The optimum spacing in the best portion of the North Dome is about 15 acres to the well. With this spacing a return

(*Continued on page* 50)

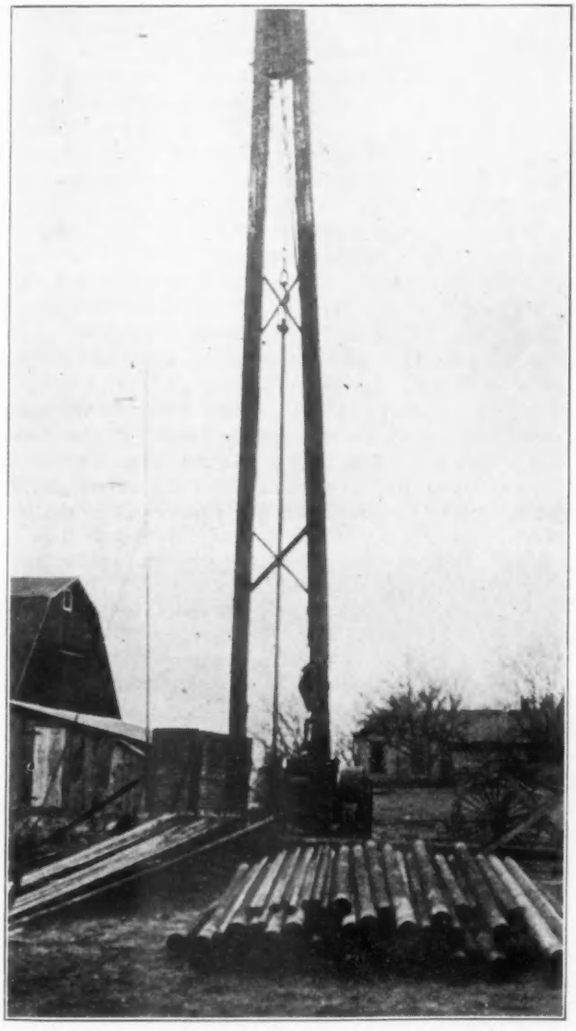
This Method

Of Re-Casing Wells Safe and Not Too Costly

By J. C. ALBRIGHT

THERE is being carried out an interesting and quite inexpensive method of reclaiming the old wells in the Delaware extension pool, Nowata County, Oklahoma, which at one time contained good producers, but as time passed, they failed, attributable principally to the deterioration of the casing.

This old pool, which was discovered sometime in 1910, resulted in an extensive drilling campaign being carried on. The period between 1910 and 1913 inclusive, saw the drilling of over 650 wells in an area about seven miles in length by approximately three-fourths of a mile in width.



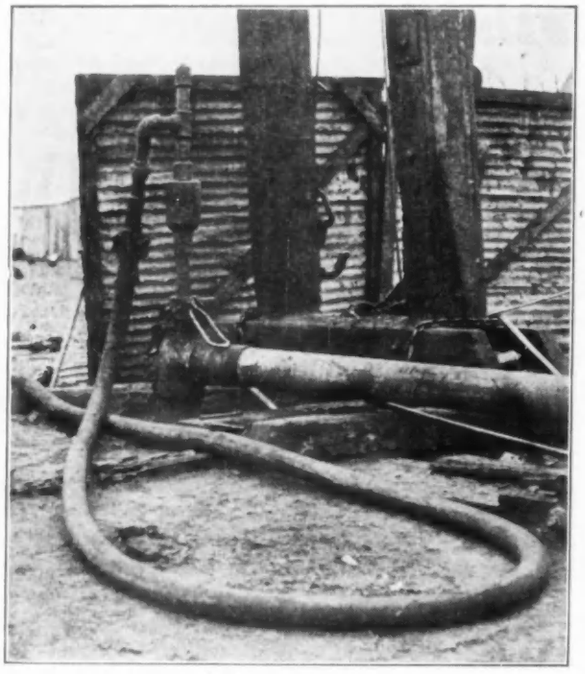
Running tubing in well about to be cleaned and recased, Delaware Consolidated Oil Company, Delaware, Oklahoma

Production was found at an average depth of 1000 feet and drilling was comparatively easy, so there was no immediate need of heavy strings of casing to be cemented in. Only one important water shut off was necessary, that being the Oswego lime which is found about 400 feet above the Bartlesville sand. The Oswego does not produce oil in this locality, only a small amount of gas is present with the water. This water, however, carries salts in solution which in time have caused the death of many of the wells, due to the corrosion of the casing at the point where it passes through the lime.

At the beginning of 1926, there had been about 300 of the original producers abandoned on account of the water breaking in, and others were going to water at the rate of two or three wells per week. At that time the properties which were owned by several of the major companies were consolidated into one company for unit operation. This new company, Delaware Consolidated Oil Company, immediately took steps leading to the rejuvenation of the field by installing the necessary equipment with which the reservoir pressure in the productive horizon could be restored with air and gas. The principal thing that occupied the company officials' attention at the inception of the program was the condition of the wells, and how these wells could be renovated without incurring an expense all out of proportion to the results which might accrue.

Reclaiming Practice Uneconomic

In reclaiming the wells, the field superintendents had been accustomed to follow the usual methods practiced in that area. When a well began to show water which indicated that the casing had been eaten through at the lime contact, they set up an ordinary well pulling and cleanout machine. After the well had been bailed to the bottom, all pipe was removed from the hole, leaving the well open and the walls unprotected, a condition where caving would be accelerated to such an extent that it was difficult at times, and impossible at others, without an extensive and prolonged cleaning out process, to run the rebuilt casing back into the hole and land it to a water tight seat. About 25 per cent of the wells were lost which they attempted to recase in that manner, due in the first place to the inability of the pulling crew to remove all the old pipe from the hole. Many times when hitching the elevators to a string of casing, it would part at the corroded point. Sometimes it was eaten so thin that a spear would



Air hose connected

not take hold of that which remained in the hole after the string had parted.

To recase the wells in this manner would require an expenditure on the average of about $900 each. This was considered too much money to spend on a well that when finally put to producing again would make only a few barrels of oil daily. Some other method would need to be found which could be much more economically applied in the reclamation of the remaining wells. Having in the engine room of the compressor plant a battery of 225 horsepower Miller, twin, gas engine driven compressors, which were used to inject gas and air back into the sand for repressuring, J. O. Lewis and L. L. Dunn, who manage the company, made a few experiments which led to the development of a novel method of cleaning the wells with compressed air, after which they were recased with small diameter pipe.

The writer visited the field on March 5, 1931, to witness the application of this method. Delaware Consolidated well Number 2 on the Wesley Barry farm, one of the properties turned into the unit company by Pure Oil Company, had been abandoned for about two years because the water had broken in from the Oswego lime and had made it nonproductive due to the flooding of the sand with water.

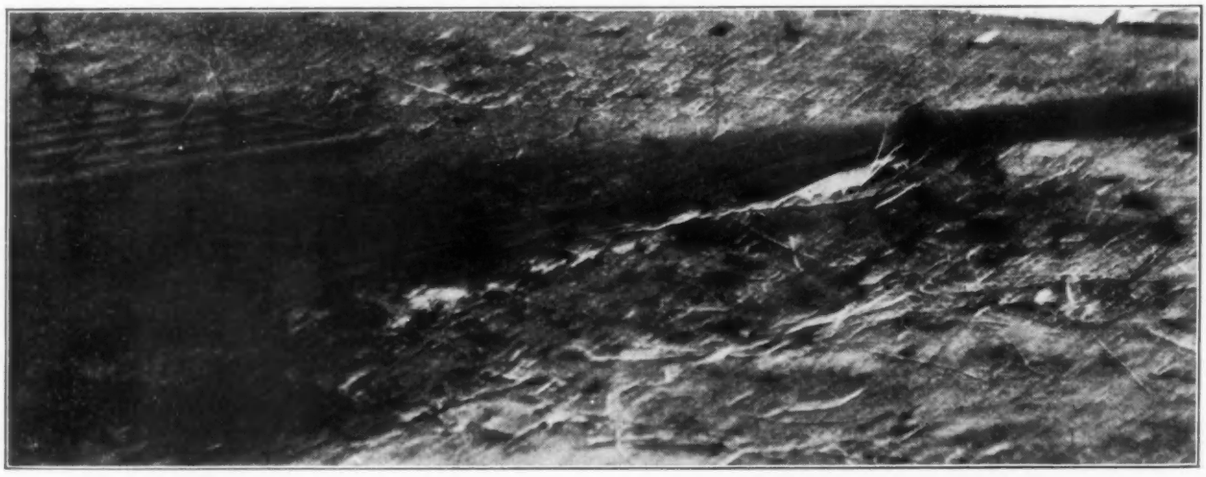
One of the two crews which the company have engaged in reclamation work, had brought all the equipment to this well the previous day, assembling everything in readiness to clean out the well. A heavy pulling machine was erected over the hole, powered by a McCormick Deering tractor. The derrick, a heavy A frame had the sheaves built in the top where the principal masts were bolted together. The spinning line from the drum on the winch attached to the front of the tractor was utilized in handling the tubing. Casing lines were rove through the other sheaves for handling the casing.

Old Tubing Removed

The old tubing was removed from the well, after having been in the hole for two years. When the tubing and rods were removed, the water line was plainly etched on them. The joints of tubing below the water line were corroded to such an extent, that upon removing the large flakes of rusted metal, holes were disclosed in the pipe's walls. A measuring line was run in to determine the extent that the hole was filled with cavings from the open hole below the 6¼-inch casing. The line indicated that there were about 100 feet of debris in the bottom, with about 300 feet of basic sediment and water on top of that.

Meanwhile the field crew had laid a two-inch line from the high pressure air main to this well carrying compressed air at three hundred pounds. A string of tubing was lowered into the hole until it had reached the accumulated sand and shale in the bottom of the well. It rested on the elevators on top of a six by six casing head which had been screwed to the top of the casing, replacing the usual one used. A rubber packer had been inserted in the upper opening, between that and the elevators, the crew had wrapped a burlap bag, which compressed the rubber packer tightly around the tubing when its weight rested on the bag. From the side outlet of the casinghead, the crew had laid three or four joints of six-inch pipe through which to conduct the basic sediment, water and accumulated debris away from the scene of operations.

A swivel was screwed into the top collar of the tubing, into the top of which was screwed a nipple with a tee running. Another nipple with a plugged collar was screwed in the top of the tee, long enough that the tubing elevators could be clamped on it. From the side outlet of the tee, a



The accumulation being blown from the hole just after the first application of compressed air

Mud and sand from the bottom of the hole

nipple with an ell extended, with another nipple and a half union. To this, the crew connected a long piece of heavy hydraulic hose, similar to that used in rotary drilling, the other end of which was flanged to the line carrying the high pressure air, after that line had been blown to remove all the scale and rust. Just back of the flange where the hose was connected, a two-inch Barco lubricated plug stop was placed with which to control the flow of the air.

Turn On the Air

When everything had been checked to determine the condition of the connections, the man in charge of the machine turned the full two-inch stream of highly compressed air down the tubing. A few gurgles were audible as the first shot of air broke through the column of fluid, then a stream of cut oil and water carrying cavings came from the end of the line laid from the casinghead. When the accumulation had been blown from the hole as far down as the tubing extended, the air was shut off and a few more joints of tubing was run in the well. When the air was turned on again, the same thing happened as before.

The hole had now been cleaned out almost to the bottom, so another joint was connected to the string of tubing, which when lowered touched bottom. The last joint extended about two-thirds of its length above the casing head, so without the weight of the tubing on the rubber packer, a man placed a bar in one of the bails of the elevators to hold the packer in place to prevent the escape of air and fluid when it was turned on. While one man turned on the air, the operator of the machine raised and lowered the tubing several times, finally allowing it to rest on the bottom of the hole with the full stream of air in it. The weight of the tubing extending a short distance in the formation in the bottom of the well has the effect of momentarily shutting in the pressure, then the tubing was quickly raised causing a blasting force to be directed to the packed settlings at the bottom.

This was repeated several times until finally there was nothing but air coming from the hole. The swivel was disconnected from the top of the tubing after the air was shut off and a quantity of water was pumped down the tubing, which, when blown from the well, brought more debris with it. This was repeated a few times until finally there was nothing coming from the hole with the water. From the time the first air was turned into the tubing, until the well was cleaned there was consumed not to exceed 2½ hours.

Wells Recased

The company has purchased discarded four and five-inch rotary drill pipe with which to recase the wells after they have been cleaned out with the compressed air method. It is shipped in car lots to a machine shop where the upset ends are removed after which new threads are run on, always with the inside reamed to prevent the tubing collars from becoming caught. New collars are furnished each joint of pipe, after which the casing converted from drill pipe is hauled to the field.

Measurements are always taken of the cleaned well to determine the top of the shot hole or cavity above the sand. Two or three of the joints of casing about to be run are perforated by burning slots through the walls with an acetylene torch. These slots are about one-half-inch wide by four inches long, burning 10 or 12 to the joint. Below the collar on the joint of pipe which is not perforated that is run to extend above the shot hole, a burlap packer is placed by wrapping sacks around the casing so that the flaring ends will lay out against the walls of the hole. Another one is wrapped a joint above this one.

After the pipe has been run with its weight resting on bottom, five or six sacks of neat cement are poured down the hole, to lodge above the first packer. It will run through if there is a faulty connection at this point, but will be caught and held by the second packer if it does run through. The old 6¼ casing is then loosened, and a mud fluid is mixed and run immediately down between the new heavy string and the old one about to be pulled. After the cavity between the two strings has been filled with mud to the top, the old string is pulled.

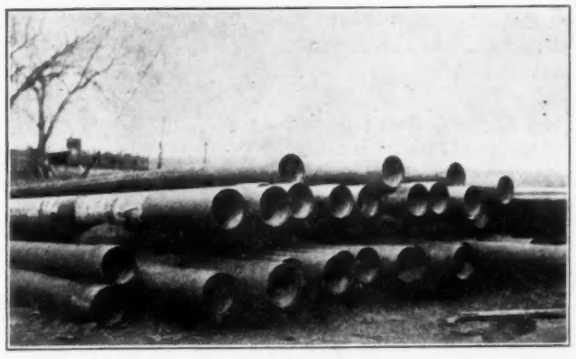
Tubing Again Lowered

After the old outer string of pipe is removed from the hole, the tubing is again lowered inside the new string of casing when the cleaning-out process is repeated until all the sand and water inside is removed. In some cases, the fine shale and sand caves in around the string of new pipe coming in through the slots, which takes more time to remove. The well is then placed on jacks and pumped in the usual manner.

To date more than 250 of the old wells have been recased in this manner after having been cleaned out with compressed air. The cost of this method has averaged about $350 per unit, and no wells have been lost. If the wells had all been cleaned in the usual manner, the 250 wells would have cost approximately $225,000, with a loss of 25 per cent. With the method now in use, the total cost has been in the neighborhood of $87,500, a difference in favor of air cleaning and running small pipe of about $117,500.

Previous to the beginning of the renovation program, the wells were producing on an average of less than one-half barrel of oil daily. On a recent seven-day test, 248 wells made 1133 barrels per day, an average of about 4.5 barrels per unit.

Acknowledgement is made to L. L. Dunn for permission to witness the method of cleaning out the wells and running the heavy casing, and for data on the relative costs of the process.



String of five-inch rotary drill pipe converted into casing ready to be run in the well

Instrument for Measuring Corrosive Properties of Soil

By E. R. SHEPARD
Bureau of Standards

As a result of the study of corrosion on underground pipes, which the Bureau of Standards has been carrying on for a number of years, a new instrument has been developed for simply and quickly measuring the electrical resistivity of soil in place, without the necessity of removing the samples to the laboratory for examination. The bureau has found that soils high in soluble salts, and therefore low in electrical resistivity, are usually highly corrosive to pipe lines. Such low resistance soils are frequently found as naturally occuring outcrops or pockets in areas of otherwise normal or high resistivity. The predetermination of such areas is a matter of great importance to the pipe line companies as well as to the utility operators, as this knowledge will enable them to provide suitable protection to pipes in exceptionally corrosive soils.

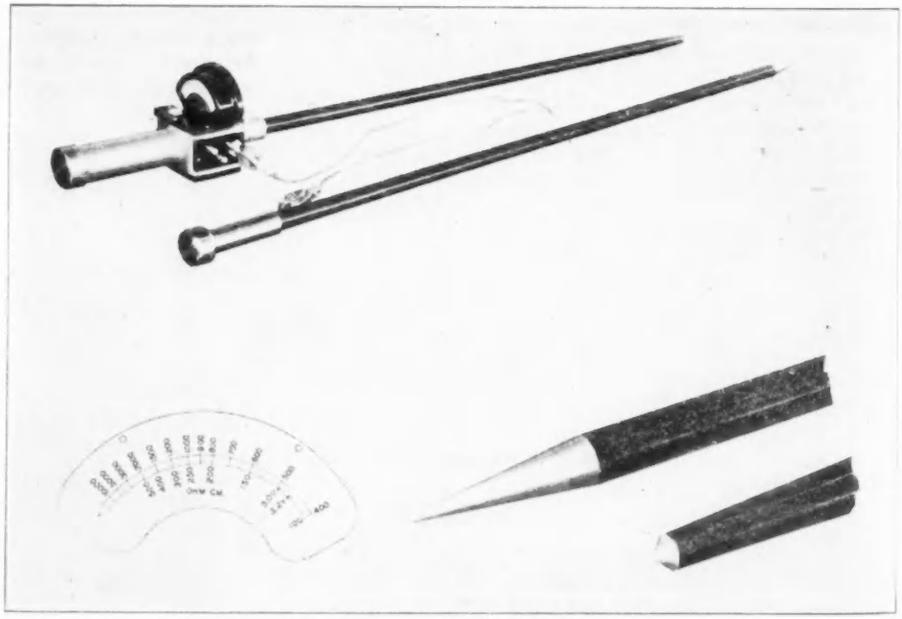
The present tendency in the protection of pipes against soil corrosion is away from a uniform coating for the entire length of the line and toward the application of coatings selected with respect to the corrosive character of the soils involved. This calls for a knowledge of varying soil conditions and a means of locating local corrosive soil areas. Such areas, commonly termed "hot spots" are prevalent in many types of soil, and it is in these regions that pipe lines suffer the greatest deterioration.

Although the Bureau of Standards has found no direct relation to exist between the electrical resistivity of soils and their corrosive properties, abrupt changes in resistivity and unusually low resistivity are found to be significant with respect to corrosion. Soils having a resistivity of about 500 ohm-centimeters or less are found to be highly corrosive. A better relation between resistivity and corrosiveness exists in alkali than in acid soils.

The Shepard Earth Resistivity Meter shown in the illustration consists of two rods or canes tipped with iron electrodes. A flashlight battery and milli-ammeter are mounted in a light aluminum frame on one of the rods. The rods are pushed into the earth with a separation of about one foot or more, at the bottom of a pair of auger holes, a shallow excavation, or the side of an open trench. The circuit is then closed and the resistivity of the soil is read directly in ohm-centimeters on the scale of the instrument.

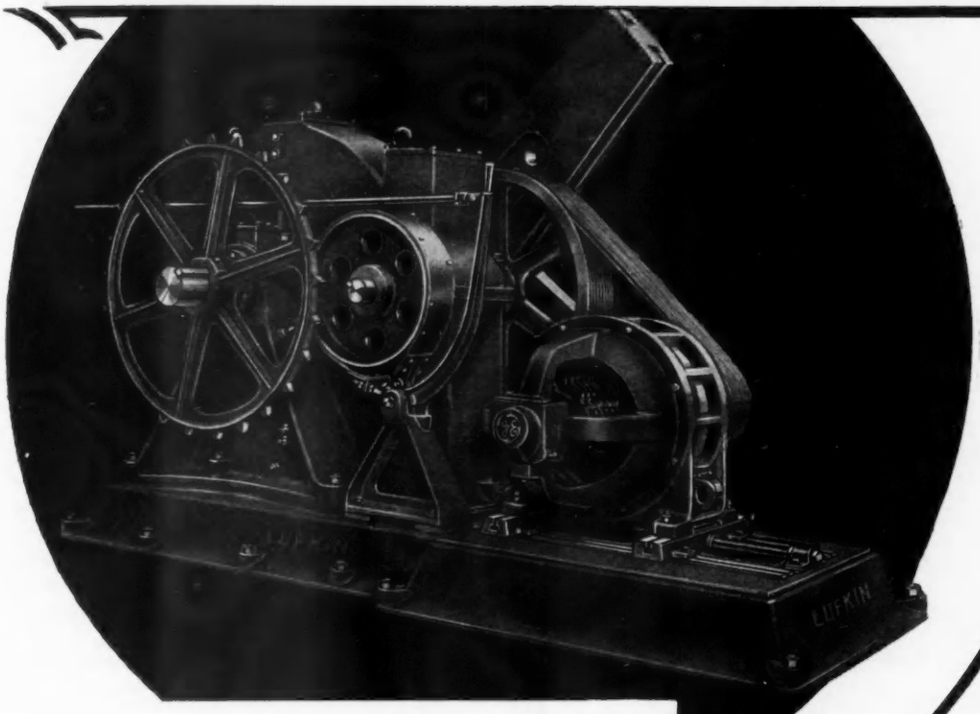
A feature of the apparatus which is unique is the manner in which polarization has been overcome or minimized and by which an accuracy closely approaching a.c. bridge determinations has been attained. This has been accomplished by making the cathode or negative electrode very much larger than the anode or positive electrode, as shown in the accompanying figure. Polarization; which is largely a cathode effect and is also a function of current density, is greatly reduced by employing electrodes differing greatly in areas.

Two scales are provided on the meter, one ranging from 400 ohm-cm upward and the other from 100 to 500 ohm-cm. Provision is also made for checking the voltage of the three-volt flashlight battery carried in the aluminum hand grip. The device, which was developed by E. R. Shepard of the Bureau of Standards, is being built and distributed by O. S. Peters of 930 H Street, N. W., Washington, D. C. It is already being employed by several large pipe line companies in Texas, Louisiana, and California in connection with their reconditioning programs.



Shepard Earth Resistivity Meter

ADAPTABILITY



Lufkin Herringbone Unit—Electric Motor adaptation

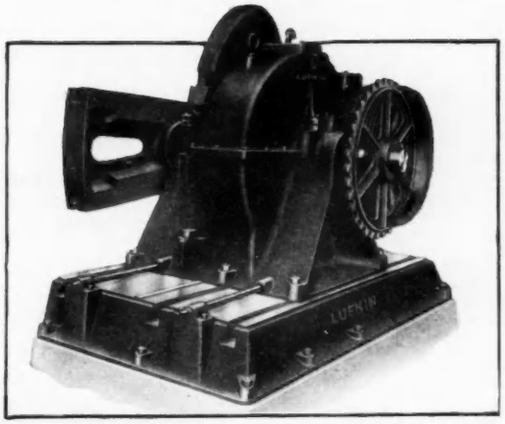
Universal Adaptability Has Made "LUFKIN" the Favored Unit

Whatever the type of prime mover... Lufkin Units are easily and inexpensively adaptable. Whether for electric motor... single or multi-cylinder, gas engine or oil engine... there is a Lufkin Unit especially designed for such operation. This flexible and highly desirable feature has been a contributing factor to the success of Lufkin Units.

Without any obligation Lufkin Engineers will gladly submit detailed blue prints and complete specifications for the adaptation of Lufkin Units to any desired type of drive. Write for complete details today!

LUFKIN
PRODUCTION EQUIPMENT
»»»» Manufactured at Lufkin, Texas, by ««««
LUFKIN FOUNDRY AND MACHINE CO.
»»»»»» Branch Offices and Warehouses ««««««
Houston, Tulsa, Los Angeles, New York,
Odessa, Seminole, Bakersfield, Eldorado,
Henderson, Tyler, Longview. ~ ~ ~

Lufkin "Twin Crank" Unit Assembly, a compact, efficient Unit-combination for derrick floor pumping of wells of medium depth.



Lufkin "Slide Base" Unit . . . designed particularly for use with single or multi-cylinder engines.

NOTICE *to the industry* . . . a

The American Engineering Corporation's deep well pumping unit can be purchased at a saving of approximately 50% of what you have been accustomed to paying for this type equipment. An entirely new principle of design and construction, the result of practical field knowledge and experience, has reduced the unit to its simplest form consistent with maintaining highest efficiency. This new pumping rig will operate for less—last longer—handle easier —is more compact—simple and applicable to any power available.

A combination crank-sprocket wheel takes the place of the customary band wheel and crank on the standard pumping rig. The drive is direct from source of power by a short chain (No. 1030) to outside of crank-sprocket wheel, thus eliminating the transmission of power through the customary keyed band wheel and crank arm. There is no strain placed on or power transmission dependent upon keys. This elimination of band wheel and crank secures a straight-line drive from power to well. The wrist-pin holes in the drive wheel adhere to A.P.I. specifications.

The entire rig is mounted on a continuous steel reinforced concrete foundation, thereby eliminating mis-alignment and permanently maintaining absolute rigidity. The jack posts and engine or motor block are steel reinforced concrete, an integral part of the foundation. In case of abandoning the well the only loss is the concrete foundation which aggregates 15 cubic yards.

The crank shaft is slotted for mounting either tug wheel or sprocket to accommodate operation of standard bull wheels or any make of tubing hoist desired for servicing well.

The counter weight is suspended from walking beam. Interlocking additional weights are furnished to secure any total weight of balance desired. Counter weights are readily released to service well.

Power for operating the rig may be either electric motor, gas, oil or steam engine as desired by customer.

AMERICAN ENGINEERING

A new company formed by two men known throughout the producing industry—Jeddy D. Nixon and Linn K. Park

oil producing

new pumping unit that *revolutionizes pumping costs*

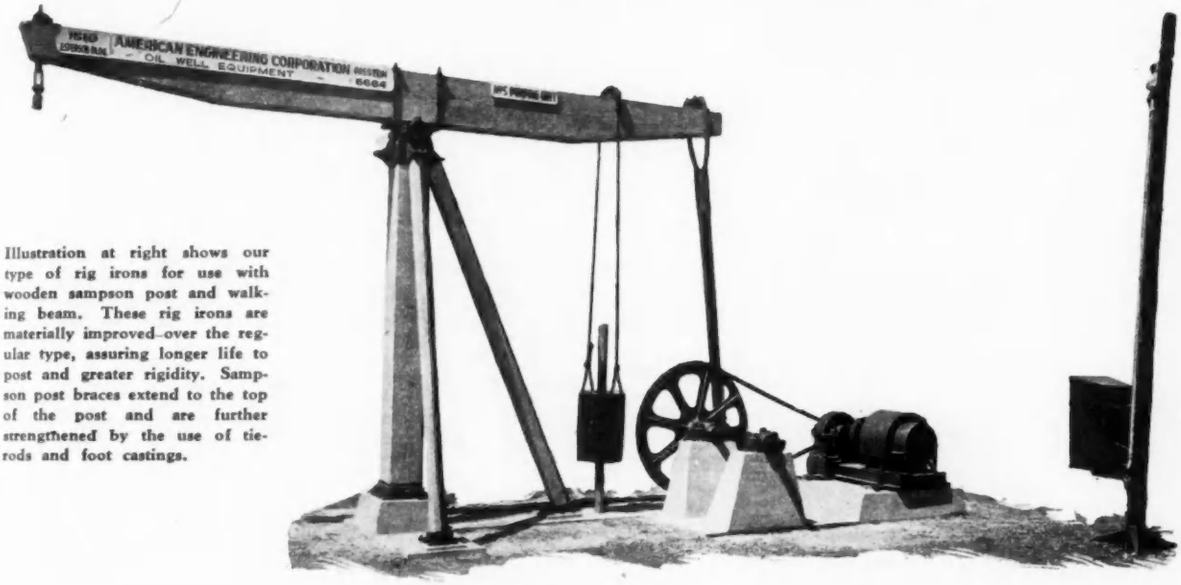


Illustration at right shows our type of rig irons for use with wooden sampson post and walking beam. These rig irons are materially improved over the regular type, assuring longer life to post and greater rigidity. Sampson post braces extend to the top of the post and are further strengthened by the use of tie-rods and foot castings.

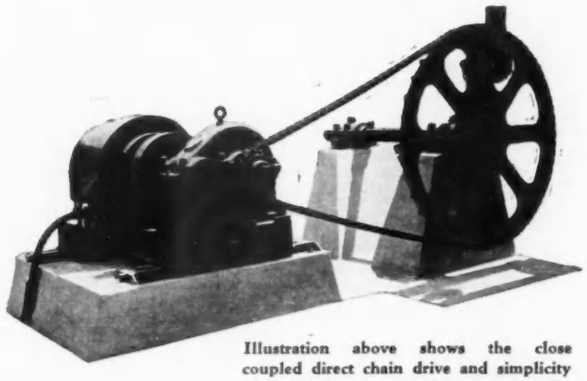
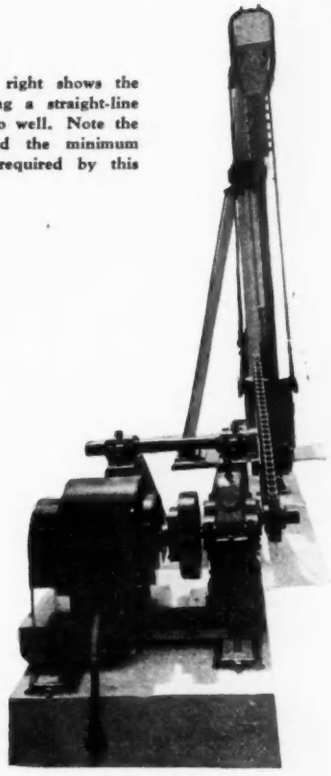


Illustration above shows the close coupled direct chain drive and simplicity of securing any pumping speeds. By having the wrist pin on the inside of the drive chain all troubles common to the usual band wheel have been eliminated. Also notice the substantial concrete jack posts and crank shaft mounting.

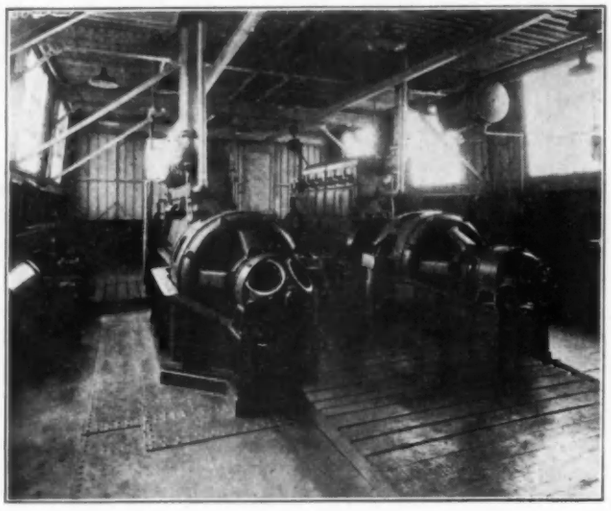
Illustration to the right shows the manner of obtaining a straight-line drive from power to well. Note the compact set-up and the minimum amount of space required by this unit.

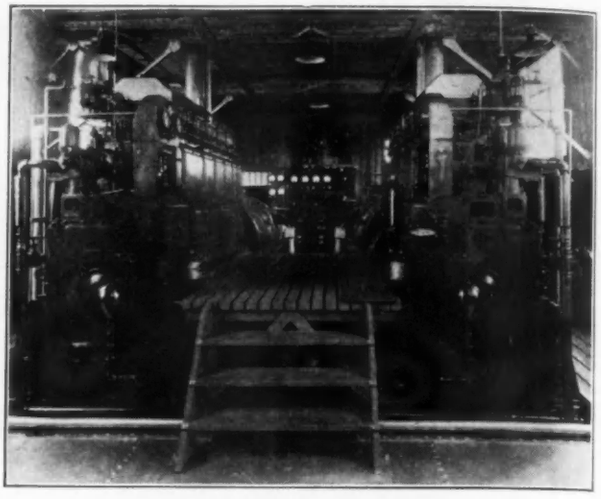


CORPORATION

1510 ESPERSON BLDG., » HOUSTON, TEXAS

LINN K. PARK - - - - - - JEDDY D. NIXON





Generators direct connected to two Cooper-Bessemer Diesel engines on The Texas Company's power barge "Energy," developing power for rotary drilling in Southern Louisiana. The view on the left is the generator end of the hook-up; right shows the engines

Floating Power Plant Meets Coast Swamp Conditions

UNUSUAL conditions under which oil field operations must be carried on in the lakes, bays and swamps of Southern Louisiana have brought forth various interesting and important developments in equipment and practice.

In its operations in the shallow waters of Terrebonne Bay, Terrebonne Parish, about 60 miles south of New Orleans, The Texas Company is employing an interesting electric power plant, mounted on a steel barge. It is interesting because of the novelty of installation and use, and also because it affords an example of what seems to be a trend toward internal-combustion engines for generating electric power in rotary drilling.

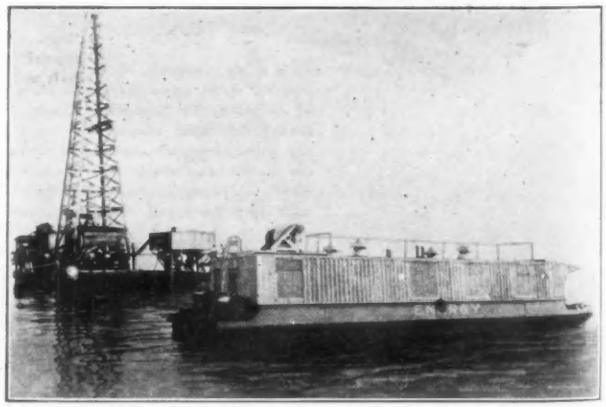
On the steel barge, which has been named "Energy," and which was designed and built especially for the use to which it is put, two Cooper-Bessemer Diesel-electric engines are installed, each having a capacity of 240 horse power. To each engine a 175 kilowat alternating current generator is direct-connected.

The ordinary power requirements of a drilling rig will be amply met by either of the twin power-units, working singly, while the other stands in reserve to be used either in case of trouble, or as a supplement in case of extraordinary demand. The installation is further capable, it is pointed out, of being used as an emergency power station for any of the tidewater operations of the owner company if need should arise.

The craft anchors some distance from the rig, where it will be unencumbered. Cables are run to the drilling location, connections are made, the engine or engines are started, and drilling begins.

By shifting and lengthening the transmission lines as required, several wells may perhaps be drilled without moving the barge. And when this possibility is exhausted, the anchor may be lifted, and the barge moved to other waters and drilling sites.

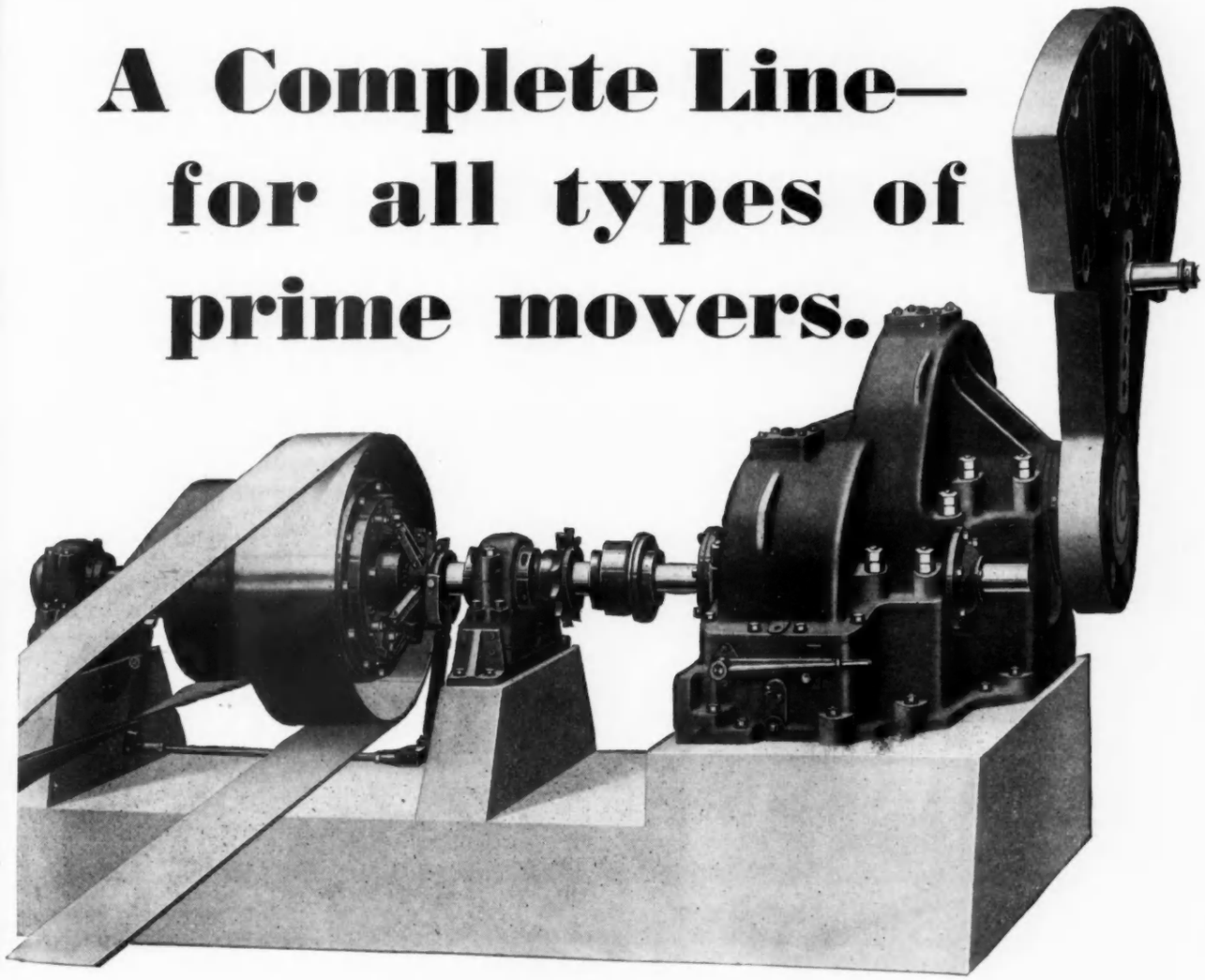
The power equipment for the "Energy" was built by Cooper-Bessemer Corporation at its Grove City, Pennsylvania, plant. It might equally well drive either alternating current or direct current generators, either singly or in pairs; and if in pairs, connected either in series or parallel. The nature of the task and the experience of those in charge govern the type of installation for any case, it is pointed out by representatives of the manufacturers of the equipment.



The "Energy" anchored alongside well to which power is supplied. Cable connections permit such shifting as caused by tides without interference

IDEAL DOUBLE REDUCTION PUMPING GEARS

A Complete Line— for all types of prime movers.



THE
NATIONAL SUPPLY
COMPANIES

Union Sulphur Company Sets *New* Gulf Coast Depth Record

By W. C. MORRIS
Staff Representative

THE fact that Union Sulphur Company's Fee 762 drilled into approximately 3400 feet of salt partially accounts for the record depth set by this well for the Gulf Coast territory in drilling to 9250 feet with relatively light equipment. Previous deep tests drilled in the Gulf Coast area have used heavy equipment to a great extent.

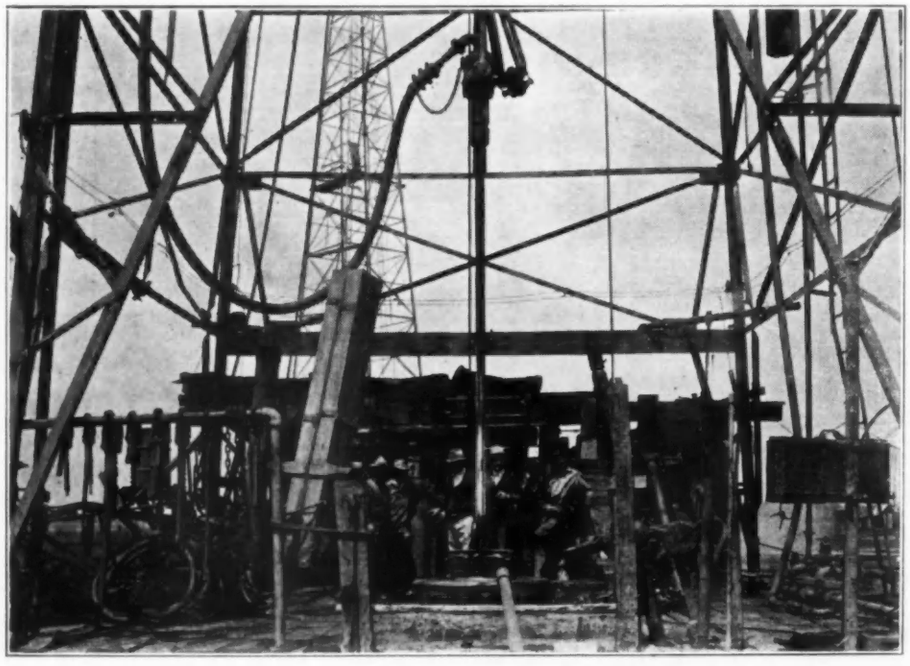
This record deep test is located in the Sulphur field, Calcasieu Parish, Louisiana, 1075 feet west and 228 feet south of the center of Section 29, Township 9 south, Range 10 west, on the southwest flank of the dome. Fee 762, which is a work-over well, was first started September 2, 1930, and was completed as a producer November 3, 1930, at 4789 feet. The well came in flowing 830 barrels of 18 gravity oil. A large amount of oil was produced for a few weeks but the well gradually fell off in production and on January 10, 1931, a decision was made to deepen.

At that time there were 1300 feet of 12½-inch casing and 4770 feet of 9⅝-inch casing in the hole, the production coming from 10 feet of sand at 4770-4780 feet. The derrick formerly used on the job, an Ideco 122-foot standard steel drilling derrick, was re-inforced in each leg with three-inch drill pipe and all of the equipment used in drilling in the well as a producer was kept on the test to drill the well to its total depth of 9250 feet, where it was finally abandoned in salt.

Although it is not considered such an unusual feat to drill a well to this depth, many operators contending that it would be possible to drill a well to 10,000 feet if the salt formation held out, this well has the distinction of penetrating salt formation to a greater depth than any other well that has ever been drilled in this area. Salt was encountered at 5864 feet and the drilling continued in this formation to the final depth of the hole, a total of 3386 feet. The previous record for the greatest depth drilled into salt was made by The Texas Company in its Wheeler & Pickens 17, in the old Humble field, Texas, when that test hit top of the salt at 2340 feet and drilled into it a total of 3070 feet where the hole was abandoned at 5410 feet.

The primary purpose of the company in drilling this test to such depth, as expressed by John Richardson, superintendent, Union Sulphur Company, was the hope that the well might be drilled through a possible overhanging salt ledge to production as had been done in the Barbers Hill field, Chambers County, Texas. This plan was considered plausible, especially since the well is thought to be located near the edge of the dome, but the operation proved the salt to be of such thickness that it was finally deemed an impossibility to fulfill the original plans.

One very interesting feature of operations in Sulphur field is the fact that central boiler stations are used and the steam is carried to the various operations within the reach of that plant through insulated steam pipes. Fee 762 is a steam-operated rig, using Grey-Hound Rotary Oilwell 11 by 11 inch engines and Oilwell 12 by 6¾ by 14 inch Mud Hog pumps which were later relined with 12 by 5⅞ by 14 inch liners to withstand the increased pressure.



The Derrick Floor, Union Sulphur Company's Fee 762, Sulphur, Louisiana, where a new depth record for the Gulf Coast was set

No Extra Equipment

The set-up for drilling this additional depth required no extra equipment, the old rig being used with only a few minor changes. The derrick was reinforced and the Boykin crown and traveling blocks used in the initial drilling were retained for the work-over. A Lucey six-inch swivel was used on the job with the four-inch drill pipe used on the first well being replaced by Pittsburg seamless 3½-inch drill

CORE RECOVERY

ASSURED WITH

Reed-Elliott Hard and Soft Formation

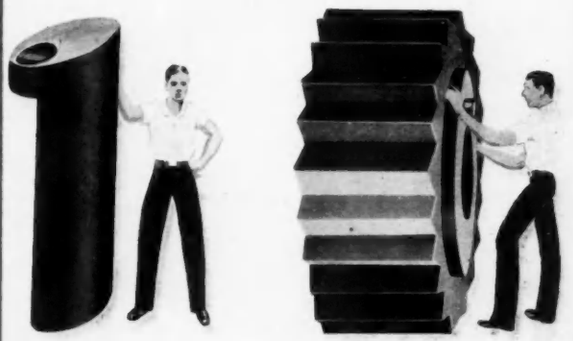
CORE BITS

PRODUCED BY

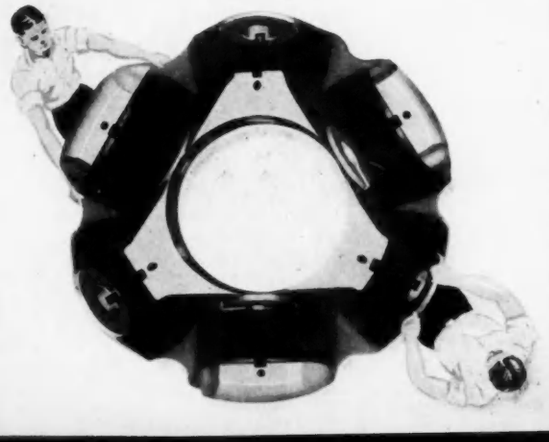
REED ROLLER BIT CO.

HOUSTON — LOS ANGELES — NEW YORK — OKLAHOMA CITY

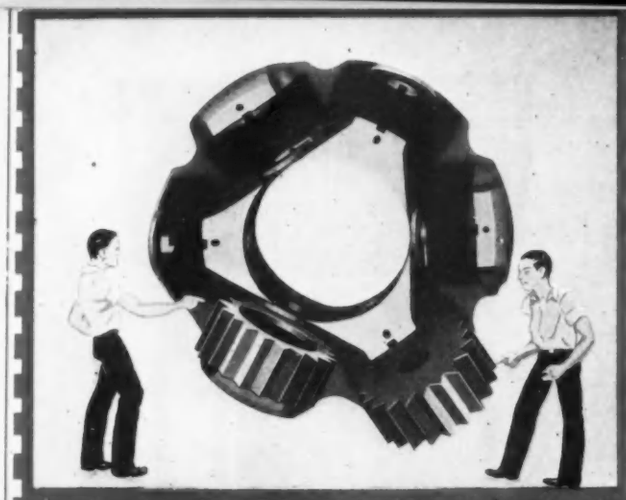
Peculiarly unique features of the Reed Rock Core Bit give durability, assurance of high percentage core recovery, and low cost of operation.



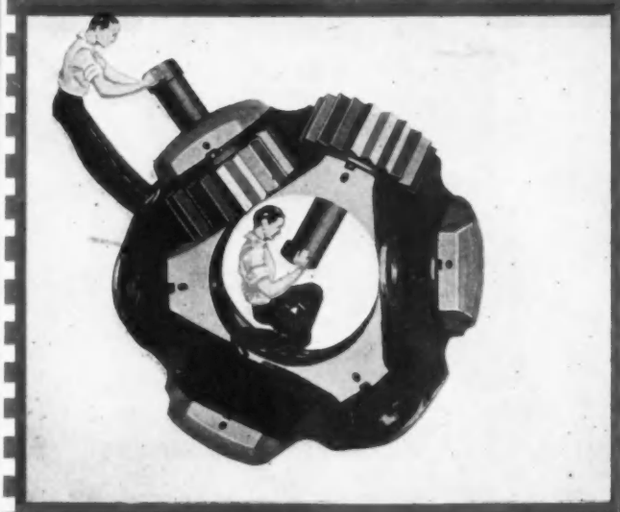
Removable, replaceable, interchangeable cutters, pins, washers and core catchers, cut down time in making changes; cut down operation cost in running; and cut down investment in replacement stocks.



Correctly designed, and sturdy in construction, head replacements are practically eliminated and footage cost of hole made, and of core recovered, is reduced to the minimum.



Tipped with Reedite where points of cutter teeth contact core and wall of hole, the life of all cutters is greatly increased; diameter of core held constant, assuring maximum recovery and providing a full gauge hole.



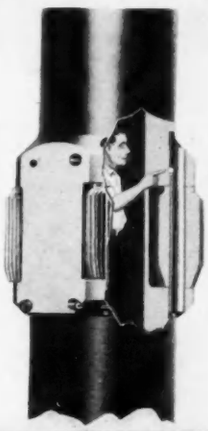
Interchangeability of cutters effects maximum economy by rerunning partially worn cutters with part sets of new cutters. Cutters, pins and washers are frequently used two or three times on Reed Rock Core Bits.

Both inside and outside cutters in the Reed Rock Core Bit Head, being cylindrical, there is no tendency for them to push out from the center of the hole, and allow cutting of an oversize core, which will wedge in the inner barrel. This type cutter also maintains full diameter hole.

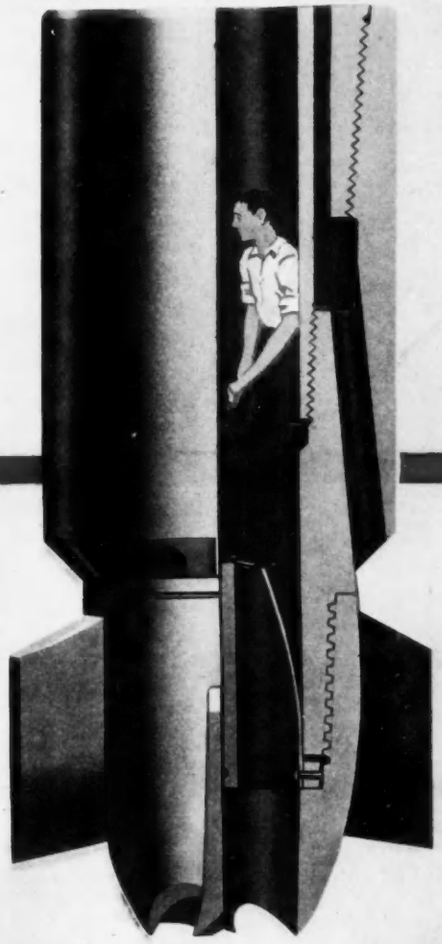
The Reed Core Catcher, by virtue of the combination compression spring and inside spirally placed springs, has through a long series of exhaustive tests, proven most effective in catching a high percentage of all core cut.

REED ROLLER BIT CO.

The **Reed Core Bit Reamer** with its four-point contact with the wall of the hole steadies the bit head, absorbs vibration, prevents whip, and assists in high core recovery in stratified or other formations difficult to core.



With no more cutting surface than an ordinary fishtail bit, the Reed-Elliott Soft Formation Core Bit Head is so constructed that only about one-half the hole immediately surrounding the core is cut at first operation, while the secondary operation, or that of reaming to full gauge, is performed by a second set of blades. Free and uncontaminated cores from undisturbed formation, are thereby obtained.



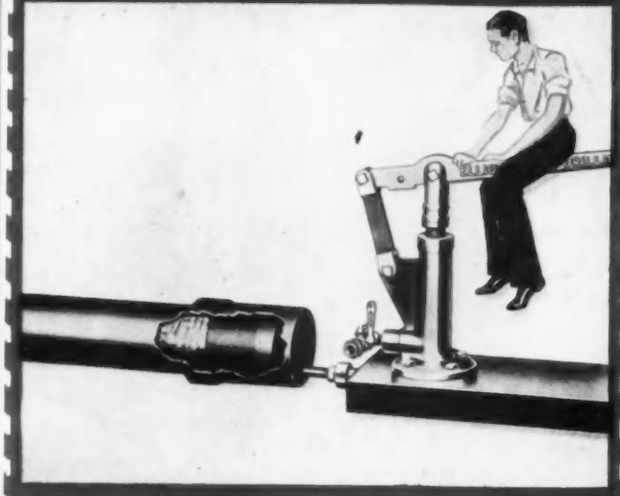
Reed Hard Formation Heads and Elliott Soft Formation Heads are interchangeable on the same inner and outer barrels. Lower subs and cutter bodies are of forged chrome nickel steel, scientifically heat treated for tough hardness, to resist torsion and abrasion. Cutter heads are of special analysis steel made to our own particular specifications.

Designed to cling as tightly to the core as possible without destroying a particularly soft core and to remain stationary with the core while the balance of the core bit revolves about it, the simple spring type catcher has proven resultful. The ring, being of bronze, furnishes a splendid sliding contact with the lower end of the upper sub.

REED ROLLER BIT CO.

Reed-Elliott Cutter Heads, either new or redressed, are positively concentric, and this is very important, for if one blade on the head is slightly over-gauge, while the other is correspondingly under-gauge, the core bit will run eccentrically and either destroy core or cut an undersized core. Cutting surfaces are all faced with Reedite.

The simple ball-and-seat type of valve undoubtedly effects a most positive action, and if checked occasionally for wear, and care usedt to see that cage is not bent or baffle plate perforations plugged, perfect operation will be experienced.



Screw type core extractors are furnished with types "D" and "E" Core Bits, while hydraulic type core pushers are furnished with all other types. This hydraulic type core pusher consists of a displacement pump designed for maximum working pressure of 10,000 pounds.

Write us for full details.

GULF COAST
AND
MID-CONTINENT
DISTRIBUTORS
MARTIN-DECKER PRODUCTS

• • • •

REED ROLLER BIT CO.

HOUSTON
LOS ANGELES
OKLAHOMA CITY
NEW YORK CITY

pipe for the work-over job. Hughes tool joints were used throughout on the job with Bettis casing protectors for the drill pipe. The casing and drill pipe were handled with a Beaumont Iron Works wire line spooler, American Cable Company's Tru-Lay one-inch drilling line, and WKM slips. The drilling line was put on February 14 and up to April 26 had made 102 round trips from below 5000 feet. The well was equipped with a pressure operated 6⅝-inch drilling blow-out preventor and Martin-Decker weight indicator. Byron Jackson elevators and tongs were used on the rig while the drilling was done with Reed Roller Bit Company's Barrett Robischaw drilling and coring bits. The sand reel was supplied by the same company. A Miller combination jar and spear and Miller shot gun valve were used. A Manhattan rotary hose equipped with Wiggins hose coupling furnished the necessary equipment for handling the mud. The steam service for the rig and pump assembly was completely equipped with Crane valves and fittings. A complete set of Williams chain tongs was kept on the floor at all times. All possible sources of injury and accident were eliminated when the chain used in driving the rotary table was housed in a lumber frame.

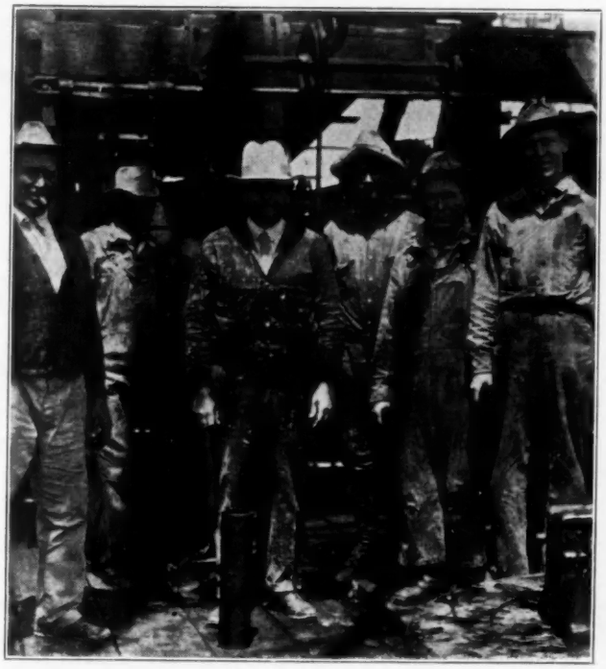
At present there are 26 producers in this field which are yielding approximately 1400 barrels of crude daily. This crude ranges in gravity from 11 to 37 degrees. The lubricating content of the oil is so high that all lubrication of machinery in the field is done with raw crude.

New Depth Record

The record made by Union Sulphur Company in drilling this well surpassed the mark set by Yount-Lee Oil Company's Houssiere-Latrielle 9, Evangeline field, Acadia Parish, by 350 feet. Housiere-Latrielle 9 was abandoned in shale at a depth of 8900 feet, March 25, 1931. The record previous was held by The Texas Company's Rayne Heirs 5, also in the Evangeline field, which was abandoned September 1, 1930, at 8730 feet in sandy shale. The deepest producing well in the Gulf Coast area is Yount-Lee Oil Company's Houssiere-Latrielle 8, in the Evangeline field, which was completed at 7450 feet for an initial production of 2000 barrels.

These records made in the Gulf Coast territory compare favorably with records made in other fields, the world's deepest hole being a little more than 9850 feet. Chanslor-Canfield Midway Oil Company set this new record May 12, 1931, when its Hobson 2-A, Ventura field, California, had drilled over 9850 feet in tough shale. The record was formerly held by Shell Oil Company's Williams 1, a wildcat in the Semitropic district, California, which recently drilled to 9700 feet. The deepest producing well known is that of the Big Lake Oil Company's University 3-C, Big Lake field, Reagan County, Texas, which is producing oil and gas from 8923 feet. Another recently completed producer in this class is Associated Oil Company's Lloyd 57, Ventura Avenue, California, which made an initial flow of 5600 barrels of 30 gravity oil at 8823 feet. The deepest test ever drilled outside the United States is the Guerrero 3 of Compania Petrolera Tamaulipas on Guerrero dome, Tamaulipas, Northern Mexico, which was recently abandoned at 7897 feet.

Since the abandonment of the well on April 28 the operators have again resumed activities on Fee 762 and are attempting to make a producer of the test at the 5050-foot level. A side-tracking job was completed at 5009 feet and the hole drilled down to 5064 feet where 417 feet of 6⅝-inch casing was cemented into the other casing preparatory to testing the oil sand.



Above is the day drilling crew on Union Sulphur Company's Fee 762. Left to right: Drew Collins, field manager; W. M. Petty, driller; John Richardson, superintendent; D. Ellender, W. Picard and H. Carlin

At left is the night crew, including Mr. Collins, Ernie O'Quinn, driller; Dutch Halfbauer, Frosty Ellender and Kieffer Brasseaux

▼ ▼

DOWN 9250 FEET

Drilling Crew, Union Sulphur Company's Fee No. 762, Sulphur Mines, La.

without a twist-off

Boring its way to a depth never before attained in the Gulf Coast or Mid-Continent fields, a string of regular PITTSBURGH SEAMLESS drill pipe recently established a remarkable record.

The well was Union Sulphur Company's Fee No. 762 at Sulphur Mines, Louisiana—down 9250 feet—the DEEPEST HOLE ever drilled east of the Rocky Mountains.

Using no special equipment, and with regular stock Pittsburgh Seamless drill pipe the skillful crew drilled to this great depth without a single twist-off or drill pipe trouble of any kind.

Strings of 9⅝″ 36 lb. and 7″ 26 lb. PITTSBURGH SEAMLESS CASING were set and cemented in this well, with complete satisfaction. No wonder so many drilling crews swear by Pittsburgh Seamless.

PITTSBURGH STEEL PRODUCTS CO.

DIVISION OF Pittsburgh Steel Co.

Pittsburgh New York St. Louis Chicago Detroit Tulsa Houston

Pittsburgh Seamless

Drill Pipe and Casing

Markets • Production • Crude Prices

H. J. STRUTH, ***Staff Economist, Houston, Texas***

Price Cut Follows Rising East Texas Production

Another up-turn in production of East Texas last week, a gain of 46,300 barrels a day, brought a suitable return slap in the form of a 30-cent reduction in crude prices. Continued selling of East Texas oil at less than posted prices had apparently stimulated the demand to the point where it was easier to sell oil than to pinch back production to the allowable figure prescribed by the railroad commission. As a result of persistent price-cutting and failure to observe proration, Humble Oil & Refining Company, on May 26, announced lower prices for East Texas crude. The new schedule fixes the price of 35 gravity oil and below at 25 cents a barrel, with a differential of two cents for each degree up to 40 gravity and above, which is posted at 37 cents a barrel. This represents a net reduction of 30 cents a barrel. Other prices quoted by Humble Oil & Refining Company, in districts where that company purchases, remain unchanged.

A rise in the East Texas production curve last week from a daily average of 257,450 barrels to 303,750 barrels resulted in boosting the national daily average crude production to a total of 2,437,150 barrels, a gain over the preceeding week of 10,350 barrels. The East Texas gain was offset to some extent by a decline in Oklahoma's production, which was down 31,350 barrels. With the exception of a slight gain in production of the Eastern States and California, all other producing areas of the United States, outside of East Texas, reported decreased production. Texas, outside of the Gulf Coast, reported a gain last week of 42,950 barrels, while Oklahoma, Kansas, Gulf Coast, North Louisiana, Arkansas and Rocky Mountain states reported a combined decrease in production of 34,050 barrels. Eastern States and California reported respective gains of 750 barrels and 700 barrels.

With production of East Texas again above 300,000 barrels, that district is charged with a daily excess over allowable of 143,750 barrels. In contrast, all other districts of Texas only show an excess daily average production of 14,400 barrels. Oklahoma and California have reached the position where their respective excesses over allowable only represent about 37,000 barrels daily. Judging from the rate of demand for crude in the United States, it is seen that practically all producing districts in the country, except East Texas, have brought about a material improvement in their statistical positions. Until last week, it was believed that East Texas operators had determined to abide by proration and bring their daily production down to 160,000 barrels a day. With the scramble to market cheap oil, however, it became apparent that there was little hope for lower production and there were definite signs to indicate that a price cut could not be avoided.

While present production indicates an excess for the United States of 184,150 barrels, it is seen that East Texas, with an excess of 144,000 barrels is solely responsible for the present situation in the crude market. As a result of the latest reduction in prices of East Texas oil, it is practically certain that other Mid-Continent districts will necessarily have to meet the lower prices in order to maintain their market position. It is believed, however, that purchasers in Oklahoma, Kansas and North Texas will await the outcome of the price cut in East Texas, in the hope that it will correct the tendency to market excessive production at lower than market prices. If East Texas production shows a decline during this week and next week, it is possible that a general price reduction will be averted. There has been some talk of a possible cut in the price of Oklahoma City crude, but it is believed that much depends upon the effect of lower posted prices in East Texas. The crude market outlook has been materially weakened by the situation in East Texas and if the official reduction in prices does not effect a cure, it is obvious that other Mid-Continent districts will be forced to accept less money for their oil.

Gasoline Demand Exceeds Supply 218,000 Barrels

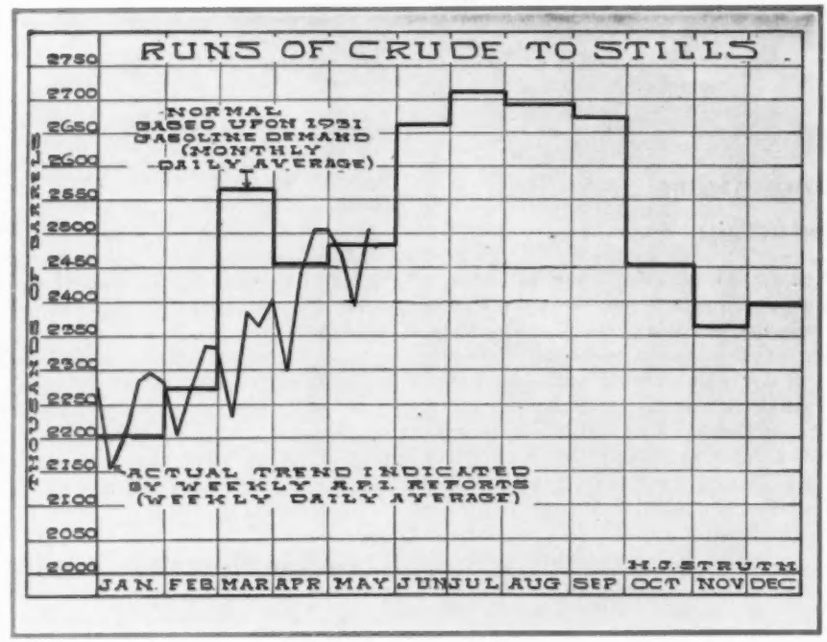
Another decline in gasoline stocks last week of 218,000 barrels, despite the fact that runs of crude to stills were maintained above 2,500,000 barrels daily, represents constructive news for the industry. However, while the rate of domestic gasoline consumption has been somewhat above expectancy during the first four months of this year, it is becoming apparent that consumption in May will not reach the previously estimated total of about 37,000,000 barrels.

A preliminary check of supply and demand factors for the first three weeks of this month seems to indicate that consumption of gasoline is not holding up as well as expected. In fact, the figures thus far in the month seem to point to a domestic demand of not more than 35,000,000 barrels, or about 2,000,000 barrels less than expected. Nevertheless, this rate of consumption represents a substantial gain over April, but a decline under May of last year. It is difficult to state in advance just what the domestic consumption of gasoline will amount to as it is impossible to obtain complete figures on a weekly basis. It is apparent, however, that unless the last week of this month shows a substantial increase in consumption the total domestic consumption for May will fall below expectations.

Stocks of gasoline in the United States as of May 23 amounted to about 46,267,000 barrels. This figure is based upon a reported total to the American Petroleum Institute of 45,449,000 barrels, which has been converted to a Bureau of Mines basis. If exports of gasoline could have been maintained this year along the lines previously estimated, there would have been a substantial decline in gasoline stocks. As it is, domestic demand has held up particularly well, but the decline in exports has seriously affected the total consumption figure.

One thing that has been demonstrated by the events of this year is that low prices for gasoline do not necessarily stimulate increased demand. The industry has seen the price of gasoline lowered to the point where it represents a loss on every gallon sold, and still the demand is maintained at about the level normally to be expected. Sensational prices seem to have no other effect than to temporarily bring bargain seekers into the

MARKET SECTION



station posting the bargain, only to result in normal buying when a majority of the sellers adopt the same schedule. The buying spurt of today is followed by a slump in buying tomorrow. The result is no extraordinary increase in total consumption and no appreciable gain in mileage of auto travel. Perhaps the public in general does not realize the relative cheapness of gasoline throughout the country and has therefore not taken advantage of possible savings on long-distance auto travel. The fact remains that a higher price for gasoline would have resulted in perhaps the same rate of consumption realized by low prices.

Los Angeles.—Formation of a committee to make a survey of the oil producing business in California has been undertaken by Mark L. Requa, who was director of the oil division of the United States Fuel Administration during the war.

Mr. Requa said the formation of the committee was on the volition of himself and other members of the committee, who hoped they might contribute something to solve the present plight of the California oil producer.

Members of the committee are Harry L. Fair, San Francisco; L. D. Dicketts, Pasadena; Roy N. Bishop, San Francisco, and Allan C. Balch. All are retired financiers.

Crude Runs to Stills, Gasoline Stocks and Gas and Fuel Oil Stocks

Week Ending May 16, 1931

(Figures in barrels of 42 gallons)

District—	Potential Capacity Daily Reporting Total	Potential Capacity Daily Reporting Per Cent	Crude Runs to Stills Total	Crude Runs to Stills Daily Average	Crude Runs to Stills Per Cent Operated	Gasoline Stocks (see note below)	Gas & Fuel Oil Stocks
East Coast	612,700	100.0	3,450,000	492,900	80.4	8,443,000	8,638,000
Appalachian	141,300	93.8	612,000	87,400	66.0	1,642,000	1,125,000
Ind., Ill., Ky.	390,800	97.5	2,326,000	332,300	87.2	6,382,000	3,653,000
Oklahoma, Kansas, Missouri	461,100	89.4	1,923,000	274,700	66.6	3,676,000	4,064,000
Texas	809,000	91.9	4,018,000	574,000	77.2	8,022,000	9,341,000
Louisiana-Arkansas	266,600	98.3	1,194,000	170,600	65.1	2,208,000	2,410,000
Rocky Mountain	150,100	93.1	428,000	61,100	43.7	1,897,000	845,000
California	898,500	98.8	3,088,000	441,100	49.7	*13,393,000	95,568,000
Total Week May 16	3,730,100	95.7	17,039,000	2,434,100	68.2	45,663,000	125,644,000
Total Week May 9	3,730,100	95.7	16,285,000	2,326,400	65.1	45,810,000	128,128,000
Total May 17, 1930	3,678,900	95.7	18,520,000	2,645,700	75.2	**53,559,000	**136,639,000
The Texas and Louisiana Gulf Coastal Figures Shown Below are Included Above in the Totals of their Respective districts.							
Texas Gulf Coast	529,500	100.0	3,008,000	429,700	81.2	6,863,000	6,629,000
Louisiana Gulf Coast	147,500	100.0	814,000	116,300	78.8	2,056,000	1,502,000

NOTE: In all the refining districts indicated except California, figures in this column represent gasoline stocks at refineries. In *California, they represent the total inventory of finished gasoline and engine distillate held by reporting companies wherever located within continental United States—(stocks at refineries, water terminals and all sales distributing stations, including products in transit thereto).

**Revised due to change in California.

MARKET SECTION

HOW LAST WEEK'S DAILY AVERAGE PRODUCTION COMPARES WITH NECESSARY AND NORMAL QUOTA LIMIT

State—	Indicated Demand Second Quarter 1931	Economic Limit Second Quarter 1931	Daily Average Last week	Daily Excess Last week	Daily Average Since Jan. 1	Daily Excess Since Jan. 1†
Arkansas	58,600	56,000	46,650	—9,350	48,462	—5,538
California	591,500	500,000*	536,700	36,700	530,715	30,715
Kansas	118,300	114,000	106,550	—7,450	109,667	167
Louisiana	78,900	71,000	69,700	—1,300	68,665	—2,335
Oklahoma	551,000	505,000*	542,700	37,700	512,049	27,049
Texas	798,700	767,000*	925,150	158,150	769,345	105,345
Balance of U. S.	254,000	240,000	209,700	—30,300	207,124	—25,376
Total	2,451,000	2,253,000	2,437,150	184,150	2,246,027	130,027

*Allowable.
†Excess based upon average allowable to date.

Quarterly Earnings Reflect Depression

Losses seem to predominate among the financial statements being received for the first quarter of this year. Following are comparative net profits of several companies for which statements have been received covering the first quarter of 1931:

	1931	1930
Tide Water Oil Company	$1,833,015*	$ 36,506
Pure Oil Company (Annual)	1,717,981*	45,712
Barnsdall Corporation	547,835*	312,341
Continental Oil Company	2,491,143*	523,302
Houston Oil Company	228,703	523,249
Simms Petroleum Company	396,376*	37,554*
Standard Oil Company (Cal.)	4,368,609	9,430,224
Panhandle Producing & Refining Company	126,557*	37,226

*Deficit.

From the foregoing it is seen that few companies have been

Cracked Gasoline Production

Week Ending May 16, 1931

(Barrels of 42 gallons)

District	Potential Total	Charging Reporting	Capacity Per Cent	Production Total	Daily Average
East Coast	246,900	222,900	90.3	604,000	86,300
Appalachian	45,900	43,400	94.6	135,000	19,300
Ind., Ill., Ky.	294,200	280,200	95.2	599,000	85,500
Okla., Kans., Mo.	219,900	197,900	90.0	389,000	55,600
Texas	395,500	379,400	95.9	826,000	118,000
Louisiana-Arkansas	109,400	106,900	97.7	235,000	33,600
Rocky Mountain	95,100	95,100	100.0	129,000	18,400
California	182,700	182,700	100.0	277,000	39,600
Total week May 16.	1,589,600	1,508,500	94.9	3,194,000	456,300
Total week May 9.	1,589,600	1,508,500	94.9	3,189,000	455,600
Total May 17, 1930		Not Available			

The Texas and Louisiana Gulf Coastal Figures Shown Below are included above in the totals of their respective districts.

Texas Gulf Coast	305,000	300,500	98.5	666,000	95,100
Louisiana G. Coast	77,000	77,000	100.0	167,000	23,900

Imports of Petroleum

(Barrels of 42 gallons)

	Week Ended May 16	Week Ended May 9
AT ATLANTIC COAST PORTS—		
Baltimore	152,000	393,000
Boston	101,000	68,000
New York	795,000	565,000
Philadelphia	98,000	148,000
Others	133,000	203,000
Total	1,279,000	1,377,000
Daily Average	182,714	196,714
AT GULF COAST PORTS—		
Galveston District	.....	.....
New Orleans & Baton Rouge	.....	.....
Port Arthur & Sabine District	.....	.....
Tampa	.....	.....
Total	.....	.....
Daily Average	.....	.....
AT ALL UNITED STATES PORTS—		
Total	1,279,000	1,377,000
Daily Average	182,714	196,714
Daily Average Four Weeks Ended	203,714	214,679
Distribution of Total Imports Is As Follows:		
Crude	1,030,000	775,000
Gasoline	65,000	260,000
Fuel Oil	184,000	342,000
Total	1,279,000	1,377,000

California Oil Receipts

(Barrels of 42 gallons)

	Week Ended May 16	Week Ended May 9
AT ATLANTIC COAST PORTS—		
Baltimore	.....	.....
Boston	.....	95,000
New York	210,000	3,000
Philadelphia	117,000	117,000
Others	144,000	.....
Total	471,000	215,000
Daily Average	67,286	30,714
AT GULF COAST PORTS—		
Total	73,000	.....
Daily Average	10,428	.....
AT ATLANTIC AND GULF COAST PORTS—		
Total	544,000	215,000
Daily Average	77,714	30,714
Daily Average Four Weeks Ended	63,071	53,536
Distribution of Total California Oil Receipts Is As Follows:		
AT ATLANTIC COAST PORTS—		
Gasoline	471,000	212,000
Lubricants	.....	3,000
Total	471,000	215,000
AT GULF COAST PORTS—		
Gasoline	73,000	.....
Total	73,000	.....

MARKET SECTION

United States Daily Average Production

1930	Oklahoma	Kansas	Texas (Outside Gulf Coast)	Gulf Coast	North Louisiana	Arkansas	Eastern States	Rocky Mountain	California	United States Daily Av.	United States Total
April	657,050	122,200	640,950	206,800	42,100	57,800	138,700	75,950	625,700	2,576,250	77,018,100
May	663,300	131,000	662,350	203,900	39,900	53,800	137,150	82,500	623,700	2,597,700	80,529,600
June	665,550	133,600	668,300	210,500	40,300	56,900	135,750	84,600	598,000	2,593,500	77,806,900
July	594,750	121,600	652,350	209,400	40,550	55,400	137,200	98,350	610,450	2,520,050	78,121,200
August	558,850	115,650	646,400	206,600	41,500	55,100	128,550	106,000	611,250	2,470,900	76,597,600
September	558,900	116,550	606,550	200,750	40,150	53,550	121,400	110,650	604,900	2,413,400	72,402,205
October	542,100	114,850	609,500	194,850	41,500	52,800	121,750	104,000	590,800	2,372,150	73,536,350
November	491,550	111,400	579,350	190,100	44,050	52,000	116,400	101,950	601,200	2,288,000	68,639,150
December	459,300	105,550	533,400	189,300	43,000	51,100	112,200	100,500	587,450	2,181,800	67,636,500
1931											
January	452,000	106,350	511,050	188,850	41,100	50,700	110,300	96,700	535,700	2,092,750	64,874,450
February	473,750	114,450	523,700	185,600	43,950	49,950	109,800	100,100	527,300	2,128,600	59,600,450
March	531,900	110,550	585,000	177,950	40,250	47,550	108,800	95,400	528,100	2,225,500	68,990,850
April	543,650	109,250	723,050	185,850	39,050	47,000	111,500	95,500	527,350	3,382,200	71,465,750
May 2	551,050	107,400	804,500	190,050	39,050	46,850	111,700	98,000	526,500	2,475,100	17,325,700
May 9	607,850	108,600	734,100	188,700	39,800	46,950	112,350	92,050	538,300	2,468,700	17,280,900
May 16	574,050	107,800	725,750	187,300	39,800	46,750	110,550	98,800	536,000	2,426,800	16,987,200
May 23	542,700	106,550	768,700	187,250	38,900	46,650	111,300	98,400	536,700	2,437,150	17,060,050
Increase	.....	.....	42,950	.....	.....	.....	750	.....	700	10,350	72,450
Decrease	31,350	1,250	.....	50	900	100	.....	400	.....	.....	.....

Last Week's Daily Average Production by Districts

TEXAS	May 23	May 16
Panhandle District	59,250	61,250
North Texas	55,750	56,950
West Central Texas	25,800	25,750
West Texas	211,100	207,450
East Central Texas	53,400	55,900
East Texas	303,750	257,450
Southwest Texas	59,650	61,000
Texas Gulf Coast	156,450	156,600
Total Texas	925,150	882,350
OKLAHOMA	542,700	574,050
CALIFORNIA	536,700	536,000
KANSAS	106,550	107,800

LOUISIANA	May 23	May 16
North Louisiana	38,900	39,800
Louisiana Gulf Coast	30,800	30,700
Total Louisiana	69,700	70,500
ARKANSAS	46,650	46,750
MOUNTAIN STATES		
Wyoming	42,950	42,800
Montana	8,100	8,450
Colorado	3,950	4,150
New Mexico	43,400	43,400
Total Mountain States	98,400	98,800
EASTERN STATES	111,300	110,550
TOTAL UNITED STATES	2,437,150	2,426,800

Summarized Review of Field Results

State—	Completions This week	Completions Last week	Oil Wells This week	Oil Wells Last week	Gas Wells This week	Gas Wells Last week	Failures This week	Failures Last week	Initial Prod. This week	Initial Prod. Last week
Arkansas	4	2	2	..	..	..	2	2	30	.....
California	..	7	..	7	..	..	..	..	.....	11,460
Indiana	9	..	..	..	4	..	5	..	.....	.....
Kansas	11	9	6	4	1	3	4	2	8,160	5,240
Kentucky	3	1	..	..	1	..	2	1	.....	.....
Louisiana	6	8	3	2	1	2	2	4	2,560	1,100
Michigan	3	1	1	1	..	..	2	..	2	500
Mississippi	2	1	..	..	..	..	2	1	.....	.....
Tennessee	3	..	..	..	3	..	..	..	.....	.....
New York	5	..	..	..	5	..	..	..	.....	.....
Ohio	7	16	2	5	3	5	2	6	65	147
Oklahoma	20	15	6	7	2	2	12	6	5,162	37,780
Pennsylvania	..	7	..	1	..	5	..	1	.....	1
Texas	132	124	84	88	13	3	35	33	556,191	581,550
West Virginia	9	12	2	2	6	8	1	2	7	2
Total	214	203	106	117	39	28	69	58	572,177	637,780
Increase this week	11	..	..	..	11	..	11	..	.....	.....
Decrease this week	..	..	11	..	..	..	..	..	65,603	.....

Comparison of Permits Granted for New Wells

State—	Week Ending May 23	Previous week	This week 1930	Total this month	This month 1930	Total this year	Total this date last year	1930 year total
Arkansas	3	..	3	6	11	23	48	108
California	..	15	25	40	68	165	309	922
Louisiana	9	6	22	34	94	146	447	948
Kansas	9	7	45	41	113	199	433	944
Oklahoma	16	15	85	56	319	443	1,306	2,830
Texas	199	90	174	536	736	2,232	3,222	7,052
Total	236	133	354	713	1,341	3,208	5,765	12,804

MARKET SECTION

able to show a profit from operations in the first quarter of this year. While this list covers only a few companies, it is undoubtedly a sample of what can be expected from a majority of the companies for which reports are not as yet available. Where actual losses are not experienced, it is evident that severe declines will be recorded. Little time is left in the second quarter and as the price structure of the industry has shown no improvement, with a tendency toward lower prices, it is evident that the second quarter will also make a rather poor showing. The only hope for the industry now is to get its house in order for the season of peak demand and determine to make a far better showing in the third quarter of this year. The stock market has discounted the first and second quarters and is looking for signs to indicate what may happen in the third quarter. If East Texas manages to get its house in order before there is a general crude market collapse, it is believed that the industry will stand a chance of making some money in the third quarter of this year.

New York City.—Another favorable factor in the general economic situation is a reported increase of 102 per cent in the sales of oil burners for domestic and industrial use for the first quarter of 1931 by the Petroleum Heat and Power Company, one of the largest manufacturers of oil burners in the country. Increased interest in industrial fields, particularly in the East, as evidenced by doubling of sales is taken by that company as an indication of returning stability in production. This change in attitude on the part of industry is regarded as a sure indication of returning industrial activity. Business seems to be settling down on an even keel, and with prices lowered in many fields, plans for efficient operation are being put into operation.

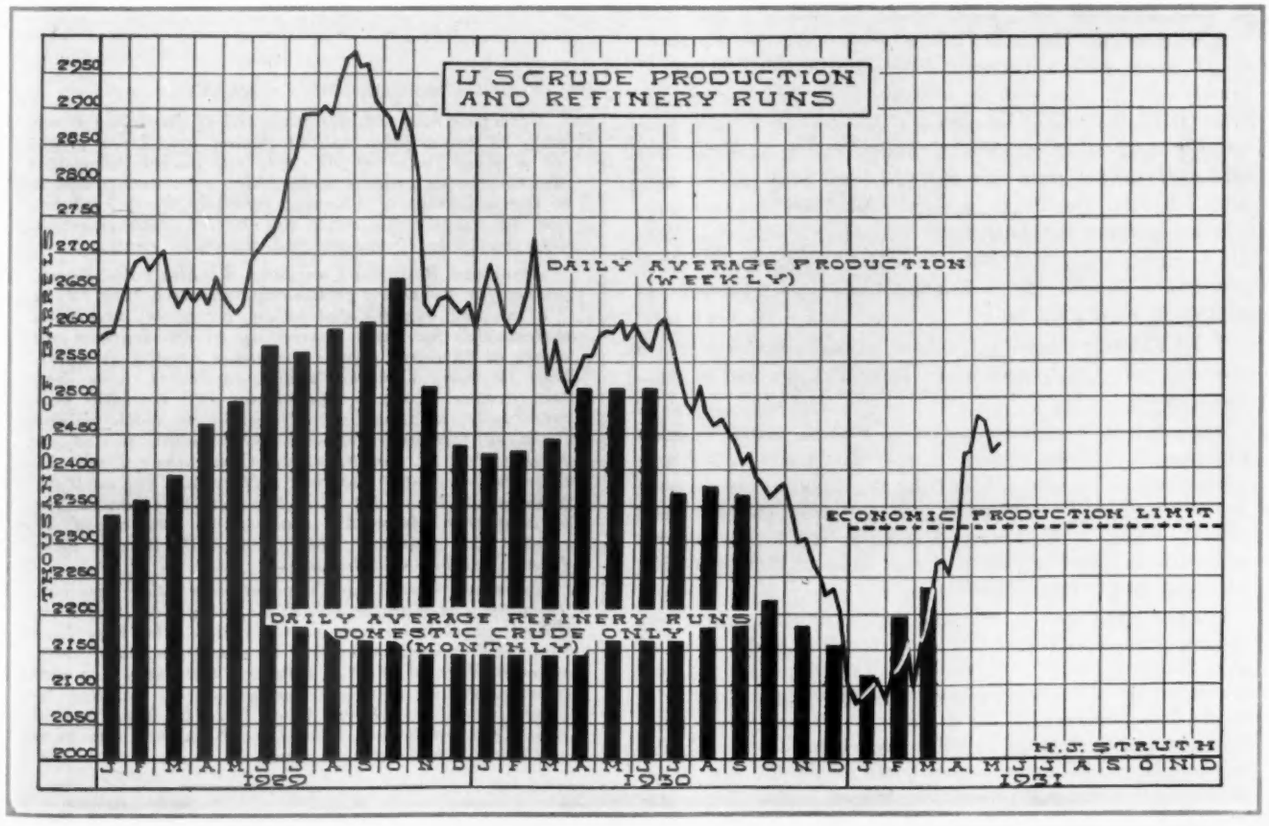
Small Refining Plants Building in West Texas

Breckenridge, Texas. — Construction of small topping plants in the Central West Texas district continues on a large scale while distress crude is available at prices that permit profitable operation. Independent oil producers are throwing together makeshift plants that range from a few barrels daily capacity upward to take care of their own gasoline requirements, and dispose of the surplus locally.

Woodward and King, Breckenridge operators, began operating a 500-barrel plant last week on the Hart ranch in western Palo Pinto County and east of Caddo, with crude contracted for from nearby leases that have been without market relief since January 1. Part of the equipment of Hart Brothers' idle natural gasoline plant has been obtained and converted so as to top crude oil.

O-Bar Refining Company has been organized by Duke Baird, Howard Samuels and others, and work is now underway on a 500-barrel plant at Coleman, Texas. The crude supply will be obtained from nearby fields that have not been adequately served with market relief in recent months, and plans are to begin operating on crude by the middle of June.

Fred Poole, Moran, Texas, and associates have completed a skimming unit rated at 80 barrels daily on the Diller ranch property in the Moran shallow field, Shackelford County. The plant is turning out a high gravity distillate for sale to tractor owners, and the product is mixed with gasoline for blending a fuel for drilling engines. J. P. Harris is operating a two-barrel capacity still on his J. P. Matthews lease in the Moran district, but the pro-



MARKET SECTION

duction is limited to private demand for his automobiles and pumping engines. J. D. Meredith is erecting a 40-barrel capacity skimming unit in the same area, and will use his own production in supplying the plant. Wm. Pardue, Jr. of Breckenridge and Baker plan to erect a small topping plant in the Eliasville field to operate on crude from their leases.

Findlay, Ohio.—Omission of the quarterly dividend of 25 cents a share by Ohio Oil Company marks the first Standard Oil unit to take such action on account of the existing depression in the oil business. In commenting on this action, O. D. Donnell, president of the company, stated that the oil reserves of Ohio Oil Company are the greatest in its history and the volume of refinery sales is exceeding that of any previous year; that it has no funded debt, but after serious consideration of the present unstable conditions in the industry, brought about by yet uncurbed overproduction of oil and resultant greatly reduced market values, it was decided that the interests of its stockholders would best be served by conservation of its resources until such time as a stable situation seems more definitely assured.

Promptness Indicates Buyers Favored East Texas Crude Cut

Promptness displayed by major companies in East Texas in revising their price schedules to conform with the reduced price scale introduced by Humble Oil & Refining Company, May 26, indicated that all were heartily in favor of giving up the idea of trying to uphold the price structure. Instead of 67 cents for 40 gravity oil and above, the new schedule limits the top grade to 37 cents, with a two-cent differential, making below 35 gravity only 25 cents, with the average production now bringing from 31 to 35 cents, or about on a par with price being paid by most independent purchasers. The following companies immediately shifted from the Mid-Continent scale to the new price schedule: The Texas Company, Gulf Pipe Line Company, Sinclair Refining Company, Shell Petroleum Corporation, Sun Oil Company and Mid-Kansas Oil & Gas Company. The latter trio follow Humble Oil & Refining Company's price scale in paying off royalty oil.

Tidal Refining Company has been paying a flat price of 40 cents per barrel, and announced that no change would be made until June 1.

According to explanation given by Humble Oil & Refining Company as to cause of the price reduction, East Texas is producing and selling about 220,000 barrels daily at less than the former recognized posted price, and that about 150,000 barrels daily is selling at 35 cents and less per barrel. The distress priced oil is mostly going to distant refining centers in tank cars, and also to local refineries.

Further breakdown of proration enforcement in East Texas is quite certain to follow the price reduction, and 10-cent oil is no longer a remote possibility, as a flat price of 20 cents per barrel at the well was being quoted by oil producers just prior to the late price adjustment in order to try and obtain relief from excessive drainage by offset well owners. A noticeable lull in spot crude purchases took place during the past 10-day period by reason of prospective buyers having anticipated cheaper oil, and a pickup in sales is now certain because of the distinct price advantage East Texas oil has over other areas.

Since the Texas Railroad Commission is admittedly without adequate police power to enforce proration in East Texas, owing to operators resorting to injunction proceedings, there is danger of deliberate steps being taken to force the state to come forward with a new set of drastic laws that will stand up in the courts. Considerable pressure is now being brought to bear on Governor R. S. Sterling to call a special session of the legislature, which adjourned May 23, to enact laws pertaining to oil proration. Rigid legislation offers the only hopes of stabilizing the East Texas situation, and students of the situation are predicting that conditions will become so bad that opponents to proration will eventually appeal to the state for relief from their own chosen method of operations.

Los Angeles.—Southern Fuel Company has started construction work on the big gas pipe line from San Fernando to Kettleman Hills, a distance of 210 miles. The line will be 25 inches in diameter. It will follow much the same line as the existing gas lines and will keep close to the Ridge Route.

The first section, from Long Beach to San Fernando, has been completed. It follows the line of Atlantic Avenue most of the way to the north of Montebello and then cuts across to San Fernando Road. This line will carry gas to the Edison plant at Long Beach for fuel.

The remaining work will involve an expenditure of about $800,000 and the contracts call for completion by November 1. One section will extend to Castaic, 31 miles to the foot of the grade; another will cross the mountains to Grapevine, and another, 108 miles long, will extend across the level country to Kettleman Hills. Contracts have been let on each section.

CRUDE PRICE CHANGES

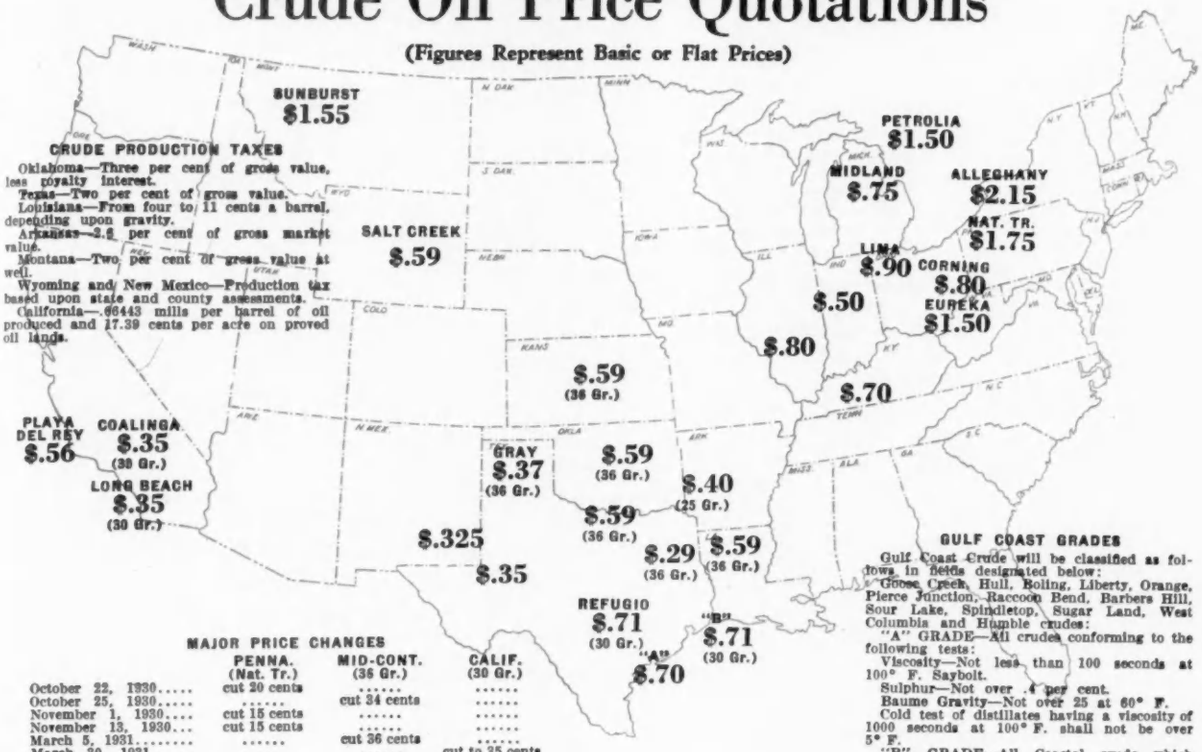
Effective May 26, Humble Oil & Refining Company initiated reduction of posted prices for crude oil in East Texas of 30 cents per barrel below the Mid-Continent gravity scale which obtained previous to the adjustment. The new schedule starts with below 35 gravity, 25 cents per barrel, with two-cent differential to 40 gravity and above, 37 cents.

American Refining Company, Wichita Falls, Texas, posted for Southern Oklahoma, effective May 22, at 7 a. m.: 31 degrees and below, 30 cents; two cents differential for each degree up to 39 degrees and above at 48 cents. Some confusion existed in American Refining Company's announcement as to bottom grade. Company purchases 700 to 1400 barrels daily in Southern Oklahoma. Rock Island Refining Company, Duncan, Oklahoma, posted effective May 23, for Southern Oklahoma: Below 26 degrees, 30 cents; one cent differential for each degree from 26 to 29 with two-cent differential for each degree above 29, making 40 and above 57 cents. This company runs about 3200 barrels daily from Southern Oklahoma.

Arkansas Pipe Line Corporation (Cities Service), Tuesday met Humble Oil & Refining Company's reduced schedule on East Texas crude. Atlas Pipe Line Company announced price 33 cents for 38 gravity, same as Humble Oil & Refining Company for that gravity, stating that was average of oil handled by them from East Texas. They have been paying 40 cents flat. Arkansas Pipe Line Company has been following Mid-Continent scale.

Crude Oil Price Quotations

(Figures Represent Basic or Flat Prices)



MAJOR PRICE CHANGES

	PENNA. (Nat. Tr.)	MID-CONT. (36 Gr.)	CALIF. (30 Gr.)
October 22, 1930.....	cut 20 cents	.....	.....
October 25, 1930.....	.....	cut 34 cents	.....
November 1, 1930....	cut 15 cents	.....	.....
November 13, 1930...	cut 15 cents	.....	.....
March 5, 1931.....	.....	cut 36 cents	.....
March 30, 1931.....	.....	.....	cut to 35 cents
April 23, 1931.....	cut 10 cents	.....	.....

GULF COAST GRADES

Gulf Coast Crude will be classified as follows in fields designated below:

Goose Creek, Hull, Boling, Liberty, Orange, Pierce Junction, Raccoon Bend, Barbers Hill, Sour Lake, Spindletop, Sugar Land, West Columbia and Humble crudes:

"A" GRADE—All crudes conforming to the following tests:

Viscosity—Not less than 100 seconds at 100° F. Saybolt.

Sulphur—Not over 4 per cent.

Baume Gravity—Not over 25 at 60° F.

Cold test of distillates having a viscosity of 1000 seconds at 100° F. shall not be over 5° F.

"B" GRADE—All Coastal crude which does not meet the test for "A" grade.

Official Postings and Differentials

(Revised to May 26, 1931)

California: (Prices effective March 30).

In all **Los Angeles Basin** fields (except Playa del Rey) oil from 14 gravity to 20.9 gravity is 65 cents. Deduct 3 cents for each degree up the scale to 30.9, making this the lowest at 35 cents. Fields in this group include **Alamitos Heights, Long Beach, Seal Beach, Torrance, Athens, Rosecrans, Dominguez, Santa Fe Springs, Montebello, Huntington Beach, East Coyote, Richfield and Brea-Olinda.**

Playa Del Rey: 56 cents flat, 20-26 gr.

In the **San Joaquin Valley** fields, 11 to 11.9 gravity crude is 50 cents per barrel, 14 to 14.9 gravity, 55 cents. Differential of 2 cents off each degree up the scale makes 30 gravity and above 35 cents per barrel. Fields in this group include **Coalinga, McKittrick, Kern River, Sunset-Midway, Elk Hills, Buena Vista Hills and Lost Hills.**

Santa Paula 14 to 19.9 gravity, 60 cents; 20 gravity, 58 cents; 21 gravity, 56 cents, and take off 3 cents for each degree up to and including 28 gravity. Orcutt 14 to 19.9 gravity, 55 cents, and take off 2 cents for each degree up to and including 29 gravity which is 35 cents.

Oklahoma-Kansas-North Texas: (Effective March 5, 1931). Below 29 gravity 43 cents with differential of 2 cents to 40 and above. Magnolia Petroleum Company posts 40 cents for below 26 gravity with differential of 1 cent to 29 gravity, 43 cents. From 29 to 40 and above, same schedule as foregoing. North Texas posting applies to oil produced in **Wichita, Wilbarger, Archer,** Northern Young, Van Zandt, Mexia, Powell, Boggy Creek, Richland, Wortham, Currie.

Ranger, North Texas, Moran and **Cook County oil:** Below 29 gravity, 33 cents with differential of 2 cents for each degree to 40 and above which is posted at 57 cents a barrel.

Texas Panhandle: (Effective April 21, 1931).

Gray County: Below 35 gravity, 33 cents with differential of 2 cents for each degree to 40 and above which is posted at 45 cents a barrel.

Carson-Hutchinson Counties: Below 35 gravity, 30 cents with differential of 2 cents for each degree to 40 and above which is posted at 42 cents a barrel.

East Texas: (Effective May 26). Below 35 gravity, 25 cents with differential of 2 cents each degree to 40 and above which is posted at 37 cents.

West Texas and New Mexico: (Effective April 21, 1931).

Winkler and Pecos County, Texas: Flat price of 35 cents a barrel. **Crane, Upton, Crockett, Ector, Howard, Glasscock**—30 cents a barrel.

Lea County, New Mexico: flat price of 32.5 cents a barrel.

Southwest Texas: (Effective April 21, 1931).

Refugio Heavy: Below 25 gravity 60 cents a barrel. **Refugio Light:** 25-25.9 gravity 61 cents with differential of 2 cents for each degree to 35 and above which is posted at 81 cents a barrel. **Mirando Crude:** 60 cents. **Salt Flat:** 53 cents. **Darst Creek:** 53 cents. **Pettus:** 75 cents. **Luling:** 38 cents; **Corsicana Heavy** 38 cents.

Gulf Coast: (Effective April 21, 1931).

Grade "A": 70 cents a barrel. Grade "B": Below 25 gravity 60 cents a barrel; 25-25.9, 61 cents with differential of 2 cents for each degree to 35 and above which is posted at 81 cents a barrel. **High Island,** 75 cents; **Jennings,** 80 cents; **Markham,** 50 cents.

North Louisiana and Arkansas.

Pine Island, Haynesville, Bull Bayou, El Dorado, Cotton Valley, Zwolle: Below 29, 43 cents with differential of 2 cents to 40 and above. Magnolia Petroleum Company posts 40 cents for below 26 gravity with 1 cent differential to 29 gravity, 43 cents. From 29 to 40 and above, same schedule as foregoing. **Stephens:** Below 29, 54 cents with differential of 4 cents to 32 and above. **Smackover,** 45 cents; **El Dorado east field** 70 cents; **Bellevue,** 45 cents.

Rocky Mountain States. (Effective Mar. 10, 1931).

Salt Creek: 29-29.9 gravity 45 cents with differential of 2 cents to 37 and above. **Elk Basin** and **Grass Creek,** 90 cents; **Big Muddy,** 65 cents; **Lance Creek,** 98 cents; **Rock Creek** 66 cents; **Mule Creek,** $1.20; **Rex Lake,** $1.10; **Osage,** 50 cents; **Cat Creek,** $1.25; **Pondera,** $1.45; **Sunburst,** $1.55; **Hogback, N. M.,** $1.40.

Eastern States. (Effective Mar. 10, 1931).

Bradford, Allegany district, $2.15; **National Transit** oil, $1.75; **Southwest Pennsylvania** oil, $1.60; **Eureka P. L.** (W. Va.) $1.50; **Buckeye P. L.** oil, $1.25; **Corning** crude, $1.15; **Somerset** in **Eureka Lines,** 75 cents; **Ragland,** 60 cents; **Oil City, Ky.,** 70 cents.

Michigan—Midland, $1.10; **Muskegon,** below 29 gravity, 65 cents with differential of 4 cents to 35 gravity; 31-31.9, 92 cents with 3 cent differential to 44 gravity and above.

Central States: (Effective March 5, 1931).

Wooster, 99 cents; **Lima,** 90 cents; **Waterloo,** $1.20; **Indiana,** 50 cents; **Princeton,** 80 cents; **Illinois,** 80 cents; **Western Kentucky,** 75 cents.

Canada: (Effective October 28, 1930).

Petrolia, $1.50; **Oil Springs,** $1.57.

Underselling in East Texas Forces Lower Prices

(*Continued from page 21*)

If East Texas could be excluded from the general economic picture, it is undoubtedly true that there has been material improvement in the industry's statistical position. In fact, if it were not for the market situation in East Texas, the Mid-Continent price structure would now be in a position to absorb a substantial increase in posted prices of crude.

General Adjustment Forecast To Follow East Texas Action

Fort Worth, Texas.—Collapse of the price structure in the East Texas district, with a sympathetic reduction taking place throughout the Mid-Continent district, is forecast by Chas. F. Roeser, president of Roeser-Pendleton, Inc., Fort Worth, and chairman of the East Texas proration advisory committee, unless proration violators bolster their price demands.

Sales of crude on contracts and in spot amounts at prices averaging about 50 per cent, less than the posted price of eight major companies producing and buying oil in East Texas is doing more towards bringing about a price revision than overproduction, according to Roeser. He pointed out that companies paying the Mid-Continent schedule, which ranges from 63 to 67 cents per barrel on East Texas oil, will not continue to pay such prices while competing units cover on their demands at about half price, and that older oil fields will probably be slashed in price also.

Acting on requests made by a group of operators, Roeser has called a special meeting of the East Texas proration advisory committee to be held at Tyler May 29. A survey of the general situation and outlook will be made at this meeting.

Representatives of the commission are gradually arranging for pipe line connections and market relief for wells in the district that have not heretofore been serviced, with considerable aid being obtained through The Texas Company having nominated 10,000 barrels daily. The latter is taking its own allowable production from one completed well in the west portion of the Joiner field, and is scattering the remainder of its quota among independent operators and companies in need of relief, according to Roeser.

Purchasers and transporters of East Texas crude received a form letter early this week from R. D. Parker, chief supervisor of the oil and gas division of the Texas Railroad Commission, asking that prompt action be taken in giving market relief for prorated wells, and to buy the prorated oil as near the posted price as possible. Parker stated that present conditions in East Texas cannot continue long without completely breaking up proration, with consequent disastrous results.

Division of Cost and Profit In Unit Operation

(*Continued from page 26*)

of approximately $475,000 per acre can be expected. This field is unique in the high value of the wet gas which has a drainage factor limited only by the structure. Consequently, a spacing of 160 acres to the well will net 90 per cent of the optimum profit. As there is very little contraction in the net profit per acre with a large acreage to the well, and a great contraction in capital outlay, a very broad spacing is most practical.

If a complete analysis of all the factors that should enter and govern unit control of an oil field, is made without bias and vividly unfolded to the operators and land-owners in a field, the organizers would meet with a minimum resistance in obtaining the requisite names on the dotted line.

Natural Gasoline Men Study Industrial Trends at Tulsa

Tulsa. — During the three days of the convention of the Natural Gasoline Association of America, Tulsa, May 19-21, the membership gave time to the study of various phases of the problems of its industry. The sessions were devoted to economics, trends in development and engineering and technical advancement.

While much interest was evidenced in improvement in plant design, specifications, the manufacture and distribution of liquefied petroleum gases, quality of customary and new products, there was also much discussion of the merits of plant consolidation and such practices as the exchange of gas in the various fields for purposes of reducing operating costs. Various speakers indicated that much thought is being given toward the establishment of larger units and super-stabilization along with the production of by-product specialties.

Although present problems are seemingly difficult of solution, those executives longest in the industry are apparently unalarmed at the prospect of larger investments in permanent plants, inasmuch as such a development is in line with the experience of most industrial endeavor. It is believed that the industry of natural gasoline manufacture is firmly established, that its research program carried out over the past five years has enabled it to sell its products to its major customer, the refiner, and that the principle problems of the future are those of greater economy in operation and production of better quality gasoline. There is definite assurance that with the further production of crude petroleum in lately discovered fields and new fields yet to be developed, the manufacturer of natural gasoline must expand his processing facilities to care for the processing of natural gas produced with such oil.

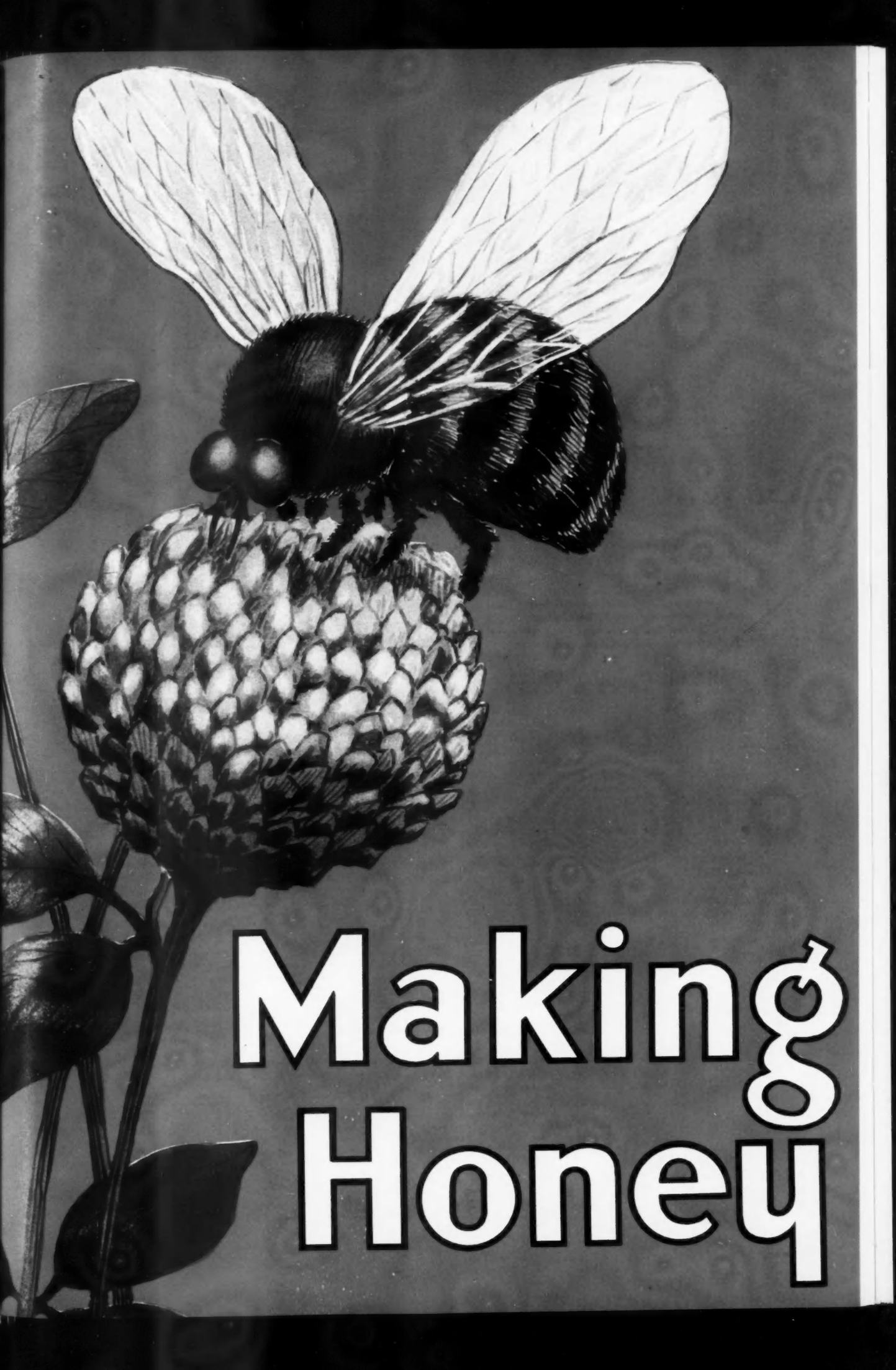
New officers named for the Natural Gasoline Association of America include: S. S. Smith, Shell Petroleum Corporation, Tulsa, president; Emby Kaye, Skelly Oil Company, Tulsa, vice-president; G. M. Campbell, United Gas and Public Service Company, Houston, vice-president; W. W. Robinson, The Texas Company of California, Long Beach, California, vice-president.

Macmillan Suit in Federal Court Postponed to June 24

Houston.—Trial of the injunction suit brought by Macmillan Petroleum Corporation to restrain the Railroad Commission of Texas from prorating oil production of the company's East Texas wells is scheduled for June 24, resetting of the case having been announced May 21 by a three-judge federal court here after the jurists had conferred for about two hours.

The postponement was occasioned by filing of an answer by counsel for the Texas Railroad Commission denying various allegations of the plaintiff corporation and necessitating a trial on fact as well as a judicial interpretation of the attitude of the federal constitution toward the state conservation law.

Continuance of the case would result, it was stated unofficially, in postponement of enforcement of the commission's edict limiting production of the properties involved pending outcome of the suit.



Making Honey

Making Money –
Saving the "Honey" from the Crude

THE BEE is synonymous with industry, thrift and systematic work, and the result of its labors is HONEY. Some bees are of solitary habits—others form colonies, having a high degree of organization.

So are the B. S. & B. PERFECTION Vapor Pressure Tanks "Busy Bees," for day and night, rain or shine, hot or cold, they are industriously engaged in keeping your crude at well-head gravity, enabling you to deliver it to the pipe lines without loss of volume or quality. By retaining the lighter fractions they prevent evaporation loss. Thus storing up the "HONEY" of the crude and by saving the valuable vapors, making MONEY for you.

Like the BEE, this tank may serve in a solitary capacity on a small lease, or a Battery of them will fill your needs for a large well.

B.S.&B. Perfection *Vapor Pressure* **TANKS**

Steel for Sweet Crude
Wood for Sour Crude

These Tanks are strong. They are not only air, water and oil tight, but *vapor-pressure tight*. They are structurally correct. An Engineering Department that produces the patterns, and supervises the construction of these Tanks is constantly maintained, and each part is made as accurate as experienced trained men, and the finest of mechanical equipment, can make them.

At each point of strain the B. S. & B. PERFECTION Vapor Pressure Tank is supported. The factors of strength include the angle iron tie rods, reinforced at top and bottom with heavy steel gussets; the ladder itself, which also serves the same purpose; the bottom angle and top rafter irons; the flanged type construction with the staves that circle the tank alternately horizontally and vertically; the pie-shaped bottom and sloping segmental deck; the copper-bearing steel, and the special heat treated bolts.

Each B. S. & B. PERFECTION Vapor Pressure Tank is equipped with the B. S. & B. Thief Hole Pressure Vacuum Valve, which operates at 16 ounces pressure, or 2 ounces vacuum.

On the Dot "Bee" S. & "Bee" Service On the Spot

"Bee" S. & "Bee" also have a "high degree of organization," making it possible to give a Busy Bee Service. A central Fabricating Plant at Kansas City, Fifty "Service Stations" throughout the Mid-Continent and Rocky Mountain Fields, with complete stocks, and our own trained tank crews at each Branch, insure delivery FROM A BRANCH TO YOUR LEASE IN A FEW HOURS' TIME. Beginning with the inquiry, starting with the erection of the Tanks, we get busy and keep busy to give you that now famed *"Service on the Dot—Service on the Spot."*

Your interest in the form of an inquiry will cause us to make a Beeline to your office through a representative (or a catalog if you prefer). Let us give you facts and figures that will convince you of the "honey" that may be saved through the use of B. S. & B. PERFECTION Vapor Pressure Tanks. Address Dept. X-15.

PRODUCTS B S & B SERVICE

Our Watchword QUICK SERVICE

Black Sivalls & Bryson INC.
BARTLESVILLE - OKLAHOMA

© B.S.&B. 1931.

Meeting in Dallas, June 3 and 4

ROBERT R. PENN
Vice-President for Production, American Petroleum Institute.

J. R. MCWILLIAMS
Chairman Central Committee on District Activities, Production Division.

WALTER H. MEIR
Vice-chairman Central Committee on District Activities, Production Division.

H. H. HILL
Chairman of the Central Committee on Drilling and Production Practice.

CARL A. YOUNG
Secretary of Central Committee and Committee on Drilling and Production Practice.

A. P. I. Mid-Year Meeting At Dallas, June 3 and 4

Dallas, Texas.—The first mid-year meeting of the Division of Production of the American Petroleum Institute will convene here at the Baker hotel, June 3 and 4. Sessions will be divided between the discussion of economic and engineering problems of the production branch of the industry. (See THE OIL WEEKLY, May 22, page 21, for complete program.)

A number of the committees on standardization will hold advance meetings starting Monday morning.

Following the meeting Friday, June 5, the board of directors of the Institute will meet in the Texas hotel, Fort Worth.

Dallas, Texas.—The Southwestern District of the Division of Production of the American Petroleum Institute which is acting as hosts to the mid-year meeting which starts here, June 3, will have a luncheon June 4 for the purpose of discussing district business and planning the program of the fall meeting.

Sterling Considers Calling Legislature for Oil Session

Austin, Texas.—Governor R. S. Sterling informed the press May 26 that he would call a special session of the legislature within 20 to 30 days from the recent date of adjournment, the called session to be devoted to oil and gas legislation exclusively. The regular session had been adjourned May 23.

The governor indicated that he would not submit the Howsley bill nor any other particular measure but would merely submit the problem for legislative action. He stated that he believed the present daily production in East Texas was 380,000 barrels, of which only about 80,000 barrels was being sold at the posted price, the remainder selling at an average of 20 cents per barrel. He stated that the situation in the oil business at the present time borders on chaos and that some immediate relief must be found.

The governor indicated that he would handle the trimming of the appropriations bill and that this would not be submitted or sent back at the called session for further consideration.

Sterling said that unless the price of oil was increased materially in the near future the death of the independent operator was certain and all of the major companies as well would be in very uncertain circumstances. It is expected here that the governor will have some very definite suggestions to make when he calls this session since that has been his method in the past. He will have a complete picture of the situation to present to the legislature that will enable it to proceed with dispatch toward framing measures which will tend to alleviate the situation immediately.

San Antonio, Texas.—Disappointing news comes from the White Point field of San Patricio County, where the Saxet Oil Company's White Point Development Company 4 made a salt water well. The test cored a sand at 4910 to 53 feet, which showed some oil. Casing was set at 4942 feet and the well tested, the result being salt water. It was drilled deeper and May 25, it cored another salt water sand at 5118 feet.

Expect Early Approval of Humble's Lower Line Tariff

Washington.—The self-imposed 20 per cent reduction on pipe line rates for petroleum from all Texas fields by Humble Oil & Refining Company has practically been assured of ratification by the suspension board of the Interstate Commerce Commission. The one day remaining for the filing of protests to this move will not likely bring in any objection on the part of competitors of this company.

The suspension board of the commission, which deals with pipe line cases, recently refused to permit this reduction on the grounds that the proposal must give competitors more than one day's notice of the plan. Although Humble Pipe Line Company has not made formal notification of its plans to competing companies, a statement of W. S. Farish, president of Humble Oil & Refining Company, has given wide publicity to the proposed reduction.

The proposed reduction, which has been given the official 30 days statutory notice, will become effective June 6, all protestants having been allowed under the interstate commerce rules, a period up to 10 days from the effective date of the proposed rates to file objections with the commission.

Research Develops Self-Locking Sucker Rod

Pumping cost statistics gathered by the production departments of various oil companies have served to emphasize the economic importance of organized effort to decrease sucker rod failures.

The solution of problems involving the fatigue strength of materials naturally depends on continued metallurgical research and experiment. A large percentage of sucker rod trouble is, however, directly traceable to unscrewing of the joints. It is believed that such failures with their attendant losses will be eliminated by sucker rods with the Dardelet Self-Locking Screw Thread, which are being manufactured and sold by the S. M. Jones Company.

These rods are not only designed to provide self-locking joints which will remain tight under all operating conditions, but they are insured against breakage in the threaded portion while in pumping service.

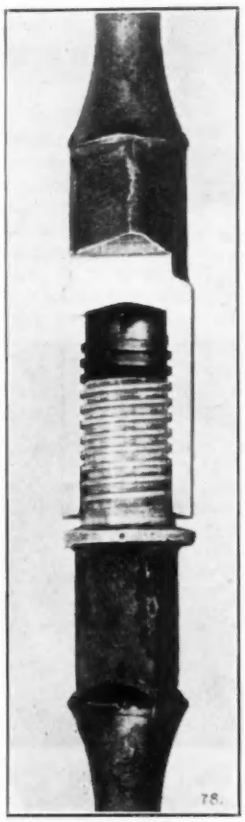
The insurance plan takes into consideration the fact that a joint break means a loss much greater than the mere cost of the broken rods. The insurance certificates which are delivered with each shipment of Dardelet rods guarantee the payment of $30 for each joint broken while in service. This sum represents the cost of the broken rods plus the average expense of recovering the broken string from the well.

The Dardelet threaded sucker rod has been developed through extensive engineering research conducted through the co-operation of Gulf Research Laboratories, S. M. Jones Company and Dardelet Threadlock Corporation of New York, owners of the American patents. The laboratory work has been supplemented by successful field service tests covering a period of seven months.

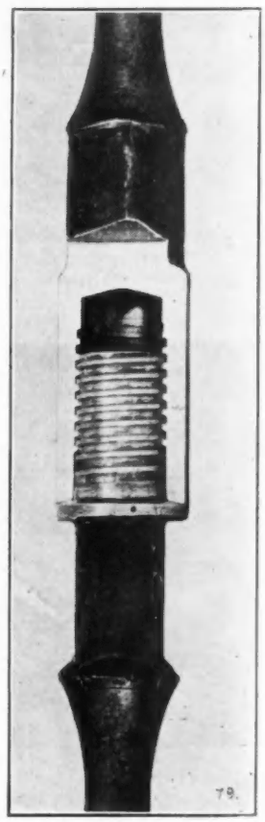
The Dardelet Thread locks by reason of the wedging action of tapered thread faces which come in contact when the box is tightened against the pin shoulder. These tapered thread faces are found at the bottom of the pin thread groove and at the crest of the box thread. (See cross section views.)

When the box and pin are being screwed together, the threads are in the unlocked position and turn freely until the box is seated against the pin shoulder. When the box is seated against the pin shoulder a partial turn of the wrench causes the box and pin to rotate without advancing. The box thread moves directly across the pin thread groove until the flanks of the threads meet and the tapered thread faces are powerfully wedged together. The joint will now remain securely locked under all service conditions for the same reason that a taper pin remains tight in a tapered hole. Box and pin have become in effect one mass. There can be no rocking movement to set up fatigue stresses.

When it is necessary to unscrew the joint, the threads are readily unlocked by turning the box section backward with the wrench. This releases the pressure generated between the tapered locking surfaces and the joint easily spins apart. The threads are uninjured by the locking action, consequently Dardelet threaded rods may be used over and over again.



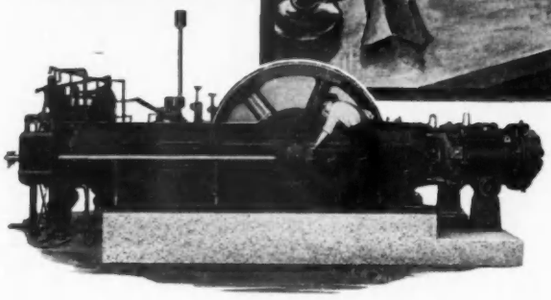
UNLOCKED



LOCKED

Some Day

YOU'LL LOOK BACK—



and congratulate yourself that your compressor equipment bears the name

TRANSIT

Uninterrupted service to the consumer has been given so much attention that today gas is probably the most reliable fuel.

A few years ago, pipe lines carrying natural gas half way across this Continent were only dreams. Today they are realities. Truly, natural gas is in the public eye as never before.

Of course, this advance in the gas industry has called for a corresponding advance in equipment to handle it.

This TRANSIT 17 x 24" Twin Gas Engine-Gas Compressor was brought out to meet a definite demand for a thoroughly reliable up-to-date engine of this size and type. TRANSIT ENGINES have always been noted for their long life. Many of the first gas engine compressors built over thirty-five years ago are still in daily service. Strength is there by reason of correct design and not by a lot of unnecessary metal.

TRANSIT ENGINES are built strong— for long life.

Send for our 48 page catalog on this Compressor. It is described in detail.

TRANSIT *Gas Engines*

BEAUMONT, TEXAS
E. L. Wilson Hardware Company
LOS ANGELES
Republic Supply Company of California
TULSA and MID-CONTINENT FIELD
Frick-Reid Supply Corporation

NATIONAL TRANSIT PUMP & MACHINE CO.
OIL CITY, PA.

PHOENIX, ARIZ.
Pratt-Gilbert Co.
NEW ORLEANS, LA.
Woodward, Wight & Co.
SALT LAKE CITY, UTAH
F. C. Richmond Machinery Co.
ST. LOUIS, MO.
Reeves & Skinner Machinery Co.

NEW YORK PHILADELPHIA CLEVELAND PITTSBURGH LOS ANGELES HOUSTON TULSA

Personal Mention—Men You Know

AMOS L. BEATY

Amos L. Beaty has been elected a member of the board of directors of the Phillips Petroleum Company. Judge Beaty has been connected with the petroleum industry for more than 20 years. His first connection was with The Texas Company, which he served as general counsel, president and chairman of the board of directors. Since his resignation from The Texas Company he has been connected with banking interests in New York. He was a director of Transcontinental Oil Company until its sale to Ohio Oil Company.

Edward G. Seubert, president Standard Oil Company (Indiana), is heading a party of directors on a visit to the company's Rocky Mountain states properties. With him are R. E. Humphreys, vice-president in charge of manufacturing; C. J. Barkdull, vice-president and treasurer; A. W. Peake, vice-president in charge of production; and J. W. Curry, director of industrial relations.

H. J. Morlang, vice-president in charge of the Midwest division, Oil Well Supply Company, Tulsa, recently spent several days at Pittsburgh, and also at Imperial Works of the Oil Well Supply Company at Oil City, Pennsylvania.

C. W. Webster, 54, Fort Worth operator, died in a hospital at Waco, May 24, as a result of being stricken with illness while on a business trip to the latter city. A widow and two children survive. Burial took place in Fort Worth, May 26.

R. C. Stamets, manager tubular department, Oil Well Supply Company, Tulsa, made an extended trip into the East Texas territory recently.

H. G. Winters has been named director of public relations for the United Gas System, with headquarters in Houston. He formerly was division manager of the Houston Gas and Fuel Company, a subsidiary of the U. G. S. The position of manager of the Houston Gas and Fuel Company has been given to K. L. Simons, who came to Houston from El Paso.

Edward Thomas Bedford, one of the pioneers of the petroleum industry, died May 21 at his home near Westport, Conn. He was 82 years old. Mr. Bedford was an associate of John D. Rockefeller, Charles Pratt and Henry H. Rogers. From 1903 until 1911 he was a member of the executive committee of Standard Oil Company of New Jersey.

Col. Carmi A. Thompson, chairman of the board of International-Stacey Corporation delivered the introductory speech at the dedication of the new Ohio State Office Building. Col. Thompson was appointed by Governor Cooper as chairman of the Ohio State Office Building Commission and has been largely responsible for the rapid progress made in its construction.

The building, a magnificent 12 story structure of marble and steel, is intended to house the various state departments of the state of Ohio. It is located in the civic center of Columbus, facing the Sciota River. Among other prominent state and national officials who participated in the dedication were Governor White of Ohio, Ex-Governor Cooper, Hon. William Green, president of the American Federation of Labor and the Rt. Rev. Bishop James J. Hartley, and others.

The International-Stacey Corporation was recently formed by the merger of the International Derrick & Equipment Company and the Stacey Engineering Company and its subsidiaries.

COL. CARMI A. THOMPSON
Opens Ohio's Business Building

THE OIL WEEKLY *editorial and advertising staffs gathered at Houston May 20-23 in annual conference. In the picture, standing, from left to right: W. E. Green, Los Angeles, H. H. King, Fort Worth, W. W. Pigue, Pittsburgh, Irwin Jones, Houston, O. R. Waller, Chicago, Dick Swinsky, New York, Tom Nelson, Pittsburgh, Wallace Davis, Houston, Wm. H. McGrew, Houston, Brad Mills, Los Angeles, W. C. Morris, Houston, Jack Logan, Houston, H. J. Struth, Houston, Floyd Swindell, Tulsa; seated: George Reid, Houston, R. E. Leigh, New York, Kent Ridley, Houston, Spencer W. Robinson, Houston, Ray L. Dudley, Houston, A. L. Burns, Houston, Grady Triplett, Tulsa, J. F. Carter, Jr., Tulsa, J. D. Isaacks, Houston.*

YOU CAN HALT A FRIEND

BY LIFTING YOUR FINGER

BUT IT TAKES A STRANGLE HOLD TO STOP A STRING OF FALLING TUBING

Someone leaving whom you don't wish to go, can be quite easily detained. Similar incidents give one a false sense of security. But when your tubing suddenly "leaves"—whose going means its ruin at the bottom of the hole, bottled up production, a fishing job, increased payroll and perhaps a ruined well—then you are absolutely helpless.

It is here that the Guiberson Catcher performs its unfailing act of protection, saving hundreds of thousands of dollars annually for operators. Falling tubing is stopped within three inches. Dove-tail tracks guide the slips instantly and accurately to the casing walls. The strong spring operates with or without fluid in the hole. Heavy striker weight overcomes the retarding action of mud or paraffin.

NEW DUPLEX CATCHER

Developed to meet safety requirements in deep wells. Multiple slips, actuated by a common means, provide greater gripping area, distribute the load and ease shock on casing. *Fully Patented.*

"Better Be Safe Than Sorry"
THE GUIBERSON CORP.
Box 1106, Dallas, Texas
California Branch: 1506 Santa Fe Ave., Los Angeles
621 Kennedy Bldg. Tulsa — 321 S. Osage Ave. Ponca City — 506 Trust Bldg. Newark, O.

Use a GUIBERSON CATCHER

GUIBERSON

BETTER BE SAFE THAN SORRY — UIBERSON

Oil and Gas Pipe Line Activities

▼ ▼ ▼

Contract Let on Montana Natural Gas Line Project

Butte, Mont.—Winston Brothers of Minneapolis, Minnesota, has been given the major contract on the Montana Power Company's $15,000,000 natural gas pipe line from the Cut Bank field, northern Montana, to towns and cities in the southwestern part of the state.

Montana Power Company states that at this time no more contracts will be let. Work is already under way, by the company's own forces, on the supply line started by Ohio Oil Company and turned over to Montana Power Company, from the Dry Creek field, southern Montana, to Bozeman and other towns in that territory. This line will be linked with the one from Cut Bank which is to supply Butte, Anaconda and Helena as well as intervening communities, so that in the end the company will have supplies of gas both at the north and at the south to furnish its huge system. Ohio Oil Company will sell such gas as is required to Montana Power Company from its vast supplies in southern Montana and northern Wyoming proved fields.

Wyoming Oil Lines Being Re-Conditioned for Gas

Casper, Wyo.—North Central Gas Company has completed the new 10-inch gas pipe line link between the eastern terminus of the New York Oil Company's line at Glenrock and the old Sinclair Pipe Line Company line from the Salt Creek field to Kansas City; rapid progress is being made in other work on the project of bringing gas from central Wyoming to cities and towns in the eastern part of the state and to Nebraska communities.

The old Sinclair Pipe Line Company line, now owned by Stanolind Pipe Line Company, is being tested out between the tank farm at Clayton and its Freeman, Missouri, terminus. All leaks are being repaired and as soon as the line has been put in condition to hold the oil it will be cleaned of all crude and forced out of the line with a water plug, after which scrapers will be run through the line and it will be turned over to the North Central Gas Company for the transportation of gas as far as Bridgeport.

Court Upholds Permit for Gas Pipe Line Into Idaho

Boise, Idaho.—Order of the state public utilities commission granting a certificate of convenience and necessity to L. B. Denning and John McFadyen to lay a gas pipe line from northern Utah into Idaho communities has been upheld by the Idaho state supreme court. Denning and McFadyen represent Western Public Service Corporation which is, in turn, affiliated with the Mountain Fuel Supply Company, a subsidiary of Ohio Oil Company. Mountain Fuel Supply Company develops gas supplies in southwestern Wyoming and northwestern Colorado for Western Public Service Company's long line into Utah. Extensions will now be laid into Idaho at a cost of more than $3,000,000. No date is set for commencement of the work, but it is understood that it will be soon.

This Pipe Line Marker Designed for Hard Wear

Pipe line mile post markers that will withstand the ravages of the elements and especially the target practice of hunters have been adopted by Pure Oil Pipe Line Company of Texas, using second hand materials and a welder's torch in making the finished product. Bullets from guns in the hands of hunters destroy and deface wooden markers almost as rapidly as new ones can be installed in some sections, but no longer give trouble to this company, as its indicators are all metal and bullet proof.

Pure Oil Pipe Line Company has standardized on mile post markers as illustrated by the accompanying photo on all of its principal lines in Texas. Second hand, two-inch pipe, cut in seven-foot lengths, is used for the upright. Old tank bottom steel plate material of 3/16-inch diameter is used for the mileage sign, and also for the insignia, which is a large letter "P." The numerals and the initial are cut out with a torch, and then the plates are welded to the post. The posts are buried two feet in the ground, with the bottom split to make difficult to remove. These markers are painted in aluminum color, and spotted at half mile intervals and all highway crossings.

Marker on Pure Oil Line

Rapid City, S. D.—Gypsy Oil Company is redrilling at its test on the Wall structure, Pennington County, South Dakota. This test is being drilled by rotary, and at 1200 feet was found to be 13 degrees off vertical. Hole was cemented and is now being re-drilled.

News From California Fields

BRAD MILLS, ***Staff Representative, Los Angeles, California***

▼ ▼ ▼

North Dome Completion Has 21,000 Barrels Initial Flow

Coalinga, Calif.—Completion and placing on production of the Superior Oil Company's Huffman 2, Section 29-21-17, North Dome area, increased the field's potential another 21,000 barrels. The well was completed at 8320 feet. The oil is 36.2 gravity, clean and is accompanied by 18 million cubic feet of gas. An eight hour flow test showed 7030 barrels, giving the well a daily output of 21,090 barrels. The flow has been pinched back to 1400 barrels.

Continental Oil Company's 2P, Section 2-22-17, is ready for completion at 7879 feet. Pacific Western Oil Company has its 1P, Section 1-22-17, ready to go on production at 8367 feet. This will be the first production for the Company in the Kettleman Hills North Dome area.

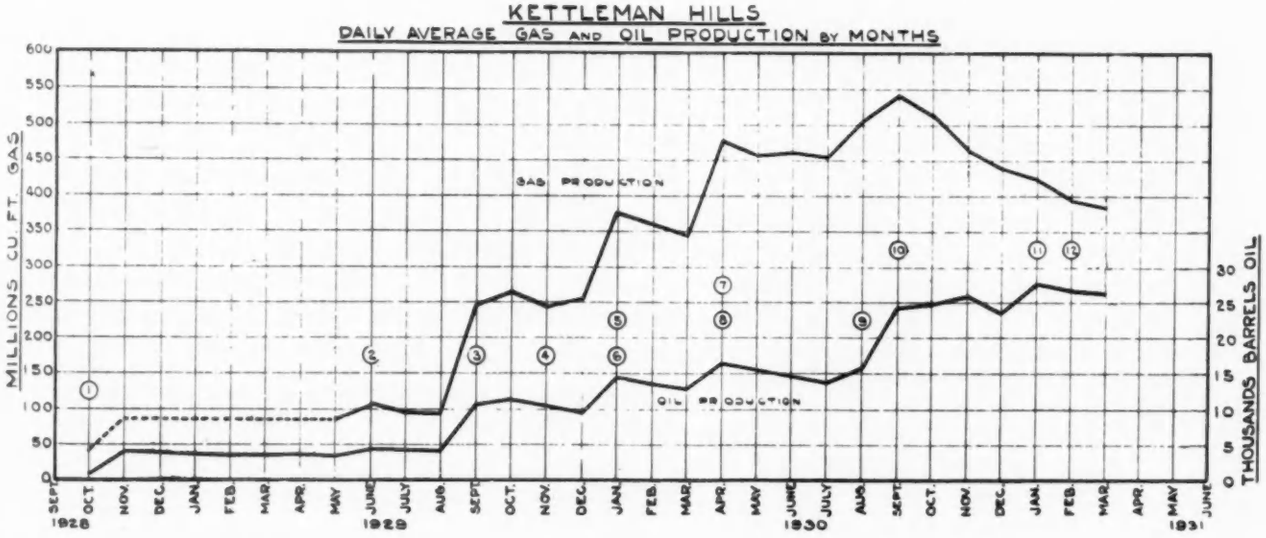
Interest in the Middle Dome area continues in the Petroleum Securities Company's Burbank 1, located on Section 30-23-19. Drilling is now at 6200 feet and continues in the brown shale. It is understood that there has been nothing particularly encouraging or discouraging about the project. Should Petroleum Securities Company's Middle Dome test be successful, Kettleman Hills would certainly loom as a new menace to the already over-production condition of the California oil fields.

Production Test in Rincon Deep Well at 10,030 Feet

Ventura, Calif.—The world's deepest test, Chanslor-Canfield-Midway Oil Company's Hobson A-2, in the Rincon district four miles west of the Ventura Avenue field, stopped at 10,030 feet in tough brown shale. It is the intention to run a liner and make a test of approximately 2600 feet of hole. From the shoe of the 5¾-inch casing set at 7479 feet the liner will be four-inch to 8200 feet. From 8200 feet to bottom the liner will be three-inch, both the four-inch and the three-inch being all perforated. It is quite probable that sufficient oil will be produced to allow the well to become the world's deepest commercial producer.

California Gasoline Use Shows Big April Increase

Los Angeles.—Low prices of gasoline have proven popular with the consumer, and taxes on April sales reached a new record. The major companies have increased gallonage at the expense of the independents but are not making any money. Petroleum stocks for April showed some decrease, with the exception of heavy crude, but there is still



① MILHAM ELLIOT 1-29 COMPLETED 10-5-28, 75483 M.C.F. GAS, 3452 BBLS. OIL, 61.7 API GRAVITY.
② S.O. 81-11P COMPLETED JUNE '29, 20,900 M.C.F., 881 BBL. OIL, 61.0 API GRAVITY.
③ CONTINENTAL ELLIOT 12-8P, COMPLETED 8-29-29, 166,546 M.C.F. GAS, 6680 BBLS. OIL, 61.3 API GRAVITY.
④ S.O. 81-11P KILLED TO DEEPEN 10-8-29
⑤ S.O. 8-1P COMPLETED 12-30-29, 101,000 M.C.F. GAS, 3983 BBLS. OIL, 61.4 API GRAVITY.
⑥ PET. SEC. FELIX 1-35J COMPLETED 1-19-30, 39,700 M.C.F. GAS, 1587 BBLS. OIL, 61.2 API GRAVITY
⑦ S.O. 81-11P RECOMPLETED 4-3-30, 92,000 M.C.F. GAS, 2954 BBLS. OIL, 62.2 API GRAVITY.
⑧ S.O. 38-35J COMPLETED 4-18-30, 53,362 M.C.F. GAS, 2048 BBLS. OIL, 62.2 API GRAVITY
⑨ A.O. WHEPLEY 1-35J COMPLETED 8-16-30, 70,782 M.C.F. GAS, 2735 BBLS. OIL, 41.5 API GRAVITY.
⑩ SUPERIOR HUFFMAN 1-29J COMPLETED 9-4-30, 35,000 M.C.F. GAS, 10,357 BBLS. OIL, 36.7 API GRAVITY
⑪ PET. SEC. FELIX 2-35J COMPLETED 1-25-31, 6043 M.C.F. GAS 5,254 BBLS OIL, 37.1 API GRAVITY
⑫ PET. SEC. FELIX 1-35J KILLED TO DEEPEN 1-29-31

The combined production of all wells to date in the Kettleman Hills field is graphically shown in the accompanying curve, together with all pertinent well data. The curve is from a paper, "The Kettleman Hills of Today," by C. R. Burgess, designing engineer, Standard Gasoline Company, which was presented before the convention of the Natural Gasoline Association of America, Tulsa, May 19-21.

plenty of all commodities in stock, with no relief in sight.

Kettleman Hills is the big scare, with every new well coming in a little better than the one before. Rumors of the crude and retail price of gasoline increasing appear to have evaporated this week.

The Oil Producers Sales Agency continues to make progress in lining up and signing up the independent producers, and there appears to be much hope for the ultimate success of the organization.

Bakersfield Deep Tests Not Yet Showing Threat

Bakersfield, Calif.—As yet neither Universal Consolidated Oil Company's deep test, No. 49, Section 32-26-21, nor Getty-Lincoln Drilling Company's 1A, Section 21-26-20, appear to be a threat toward California production increase. The Universal Consolidated Oil Company has completely recovered from the menace of high pressure water and is coring ahead at 5425 feet in the brown shale with an occasional oil sand streak. Drilling on the Getty-Lincoln Drilling Company well is at 4088 feet, and the hole is being reamed for the setting of a protection string. At this point a good looking shale body was picked up, and to get away from the high pressure water the protection string is expected to allow drilling to continue in search of a deeper sand unhampered.

Maricopa Flats Deep Well Shows Unfavorably on Test

Maricopa, Calif.—Failure of Birch-Royer Oil Company's 9000 foot deep test well in Section 7-11-23, Maricopa Flats, to come in on schedule a high gravity gusher relieved a lot of operators in Kern County of adding to the already over-production condition of the area. The well turned out to be a keen disappointment in that during the drilling a number of rather remarkable showings were encountered, but failed to show up when the production test was made. The 9000-foot hole was swabbed down to 7600 feet practically dry. Success of this venture would have compelled more than a dozen companies to offset. Included in the number are Union Oil Company, Standard Oil Company, Rio Grande Oil Company and Barnsdall Oil Company.

Venice, Calif.—There appears to be quite a possibility of Union Oil Company extending the productive limits of the Venice field in a southeasterly direction. King Vidor 1, the well in question, stopped at 5991 feet in schist, and is being reamed to bottom for the running of liner. A number of good showings were noted under the shoe of the 6⅝-inch casing at 5830 feet to bottom. There is no new activity in the townlot area, and only nine wells are drilling in the field. It seems that unless some new development takes place soon, town lot drilling will be at a standstill.

Sunset Beach, Calif.—At Sunset Beach, a wildcat area located about midway between Long Beach-Signal Hill and Huntington Beach, there has been an epidemic of locating wells on townlots. Some 20 locations have been made. The locations are being made principally by the land owners of the vicinity, who seem to think that filing a notice of intention to drill with the Department of Oil and Gas constitutes a permit to drill, and will exempt them from the provisions of the Sharkey Bill which prohibits close drilling.

▼ NEW MEXICO - ROCKY MOUNTAIN AREA ▼

Start Two Greasewood Dome Tests on July 1

Denver, Colo.—Two new tests will be spudded in July 1, 1931, on Greasewood dome structure, near Fort Morgan, Colorado, by the recently organized Aztec Corporation which has contracted with Capitol Drilling Company of Oklahoma City for the two tests on Aztec holdings. The drilling company is controlled by Wirt and Harry Franklin of Ardmore, Oklahoma, and has considerable equipment in the Oklahoma City field which is not in use and from which a first class outfit for the Greasewood wells will be selected. Contract calls for a total depth of 7500 feet if necessary.

Aztec Corporation is a promotion of Miller Robert Taylor and his associates. Samples of cuttings will be furnished to other operators in the district who furnish containers for the same. It is understood that several major companies have contributed acreage and "dry hole money" to drill the tests.

The only actually drilling test on the structure is that of the Reiter-Foster Corporation which is rotary drilling below 3000 feet. This test is only about 1000 feet west of Platte Valley Petroleum Corporation's discovery well which is still flowing 350 barrels per day.

Billings, Mont.—Contract to furnish the Montana state highway department with road oil for a part of the surfacing to be included in the year's highway improvement program has for the first time been awarded to a Montana refinery. Yale Oil Corporation has been given a contract for this oil, some of which is already being furnished, the balance to be supplied when additional tankage and equipment are completed.

Lusk, Wyo.—Phillips Petroleum Company's interesting wildcat core test on the Middle Creek structure, in Niobrara County, eastern Wyoming, has completed a fishing job which delayed it for a time, and has now resumed drilling ahead around 500 feet. The test unexpectedly developed a good showing of high grade oil at 170 feet in what was either the base of the Morrison or the upper Sundance. Objective sand is the lower Sundance, expected around 650 feet.

Casper, Wyo.—Midwest Refining Company has plugged its deep test on the Midway dome structure, 12 miles north of Casper, from 6700 feet to 5959 feet, and well is standing cemented at that point, just below the Muddy sand. When cement sets, hole will be cleaned out and a 13-foot saturated sand will be tested. It will be shot, the theory of geologists and engineers being that commercial production will be developed in the Muddy.

Buffalo, Wyo.—Oil and gas lease offered by the Department of the Interior on May 18 was sold to C. C. Landes and Ray Hake of Basin, Wyoming, for $4 per acre. Land consisted of 37.89 acres in the Kirby Creek field, Washakie County, Wyoming.

Rawlins, Wyo.—Producers & Refiners Corporation is moving in for its wildcat well to be drilled on Overland dome, west of Elk Mountain and eight miles southeast of the railway station at Walcott, in Carbon County. This is to be a standard tool job, objective horizon not reported.

Oklahoma--Kansas Field Notes

FLOYD SWINDELL, *Staff Representative, Tulsa, Oklahoma*

▼ ▼ ▼

Oklahoma City Wells Add 150,000 Barrels Potential

Oklahoma City.—Completions and new locations were even in the Oklahoma City pool during the past week when five wells went on the production list at a combined potential of more than 150,000 barrels. Production for the week took the expected decline under the previous seven-day period when the daily average was 143,360 barrels, a drop of 30,210 barrels daily. Of the present list of more than 100 locations, rigs and drilling wells, only four are outside of the townsite.

Phillips Petroleum Company's Sam 1, SW SE NE Section 3-11n-3w, the largest well of the past week, gauged 981 barrels the first 30 minutes and 4308 barrels the first 2¼ hours. Production is coming from 21 feet of Wilcox sand topped at 6297 feet. During the two hour and 15 minute gauge the well actually filled about 5500 barrels of space in the tanks. After draining off the oil it was found that 1200 barrels of sand had been produced or at the rate of more than 525 barrels of sand per hour. This gives some idea as to the reason for well head connections cutting out during flow periods of a few minutes. During the early life of the pool most operators set casing high and it was not uncommon to find as much as 400 feet of open hole, most of which was sand. Phillips Petroleum Company's Sam 1 has 125 feet of open hole below the 6⅝-inch casing.

Don Leon Oil Company extended production about two locations west when Burt 1, NE NW NW Section 10-11n-3w, flowed 5176 barrels in three hours from 62 feet of Wilcox sand topped at 6475 feet. Six and five-eighths inch casing was set at 6361 feet, somewhat higher than recent practice of a majority of operators. Indian Territory Illuminating Oil Company's M.K.&T. 6, NW SW SW Section 35-12n-3w, on the north edge of the pool produced 900 barrels the first hour, during which time connections sanded up and it had to be shut in. Top of the Wilcox was encountered at 6275 feet and penetrated to a total depth of 6392 feet. Several wells in this part of the pool have encountered water when drilled too deep and operators are following a cautious policy in drilling ahead in the sand.

Courter Oil Company, a new comer in the pool, brought in its first well when White 1, SW SW NW Section 10-11n-3w, gauged 2285 barrels the first three hours along with gas at the rate of 20,000,000 cubic feet.

Oklahoma City Allowable Increase Hearing May 28

Oklahoma City.—May 28 has been set by the Oklahoma Corporation Commission as the date for hearing in regard to applications seeking to raise allowable production in the Oklahoma City pool. The statewide proration committee, represented by Wirt Franklin, is asking that allowable production from the pool be increased from the present figure of about 160,000 barrels daily to slightly more than 181,000 barrels daily. At the same time a hearing will be granted at the request of Otto Bradford, field umpire, at which time he will seek to determine the percentage which is to be taken from wells during June, July, August and September. The statewide committee has recommended a division of the pool into four groups or productive classifications based on the charge that proration as now practiced is not equitable to all parts of the pool. It is proposed to allow Arbuckle lime producers 75 per cent of their potentials, lower Simpson sand wells to be allowed 10 per cent, the north Wilcox area three per cent and the south Wilcox area 10 per cent. It is claimed that water troubles along with decreasing pressures and production greatly handicap operators in following the present restrictions.

Seminole Area Wildcats Show Nothing Important

Seminole.—Wildcat tests scattered throughout the general Seminole district failed to reveal anything of startling interest during the past week and no important inside or adjacent wells were completed. Droppleman Drilling Company and Amarada Petroleum Corporation had a small showing of oil in Hunton lime at 4778 feet in Jones 1, SEc NW Section 2i-8n-3e, in the Tecumseh area. It is now shut down pending decision as to whether it will be drilled to Wilcox.

Blackwell Oil and Gas Company's Holmes 1, SW NE SW Section 9-7n-8e, east of the Seminole City pool, topped the sand at 2923 feet and cored to 2970 feet with a good show of oil. Casing will be set at 2925 feet to test.

Amarada Petroleum Corporation encountered Viola lime at 4094 feet in L. Tiger 1, NE NW SE Section 3-8n-5e, in the Carr City pool, and drilled to a total depth of 4160 feet.

Deep Search in Cement Area Holding Interest

Tulsa.—Development in Southern Oklahoma is confined to the drilling of extension tests in four pools none of which have any other activity of importance and to scattered wildcats most of which are in outlying areas and important for that reason alone. Exploration of deeper sands in the Cement district is being closely followed. Among the wildcat tests on the active list, several are located in areas upon which little geological information can be obtained at the surface. These should prove valuable from the viewpoint of the additional geological information which will be obtained.

Tatums District

Activity in the Tatums pool during the past week consisted of one producer, one location and a new start. Amos Drilling Company and Walter H. Gant swabbed 612-barrels of oil during the first 24-hours from Sparks-Hooks 1, SE SE SE Section 13-1s-3w, in the northeast edge of the pool. Production is coming from sands logged between 1946 and 2106 feet with total depth at 2110 feet in black shale. Further attempt will be made to define the east

limit of production by Trevelyn Oil Company which has staked location and is moving in material for derrick at D. W. Ratliff 1, NE NW SW of Section 19-1s-2w, two locations east of production. Nearest production at this point is on Magnolia Petroleum Company's Dickerson lease which yielded three nice producers and one dry hole which is surrounded by production on three sides. The new Trevelyn well should be valuable in determining whether or not Magnolia Petroleum Company should drill the southeast corner of its Dickerson lease and it is so located as to force several offsets. K D Oil Company and Frank Gouin have cemented surface casing at 30 feet in J. W. Burton 1, SW NW Section 30-1s-2w, about 3/8 of a mile south of production in the southeast extension.

Cement District

Mid-Kansas Oil & Gas Company and Ramsey Petroleum Corporation are preparing to resume drilling after coring at 7355-7367 feet in Preston-Culp 6, NW NE NE Section 6-5n-9w, in the western portion of the old Cement pool in Caddo County. Operators failed to recover the core but cuttings at the total depth showed sandy shale. This is the deepest test now drilling in the entire Mid-Continent area and the present depth has been rivalled by only one other test in recent years. Stanolind Oil & Gas Company's Howell 1, SW SW Section 14-26n-24w, attained the depth of 8583 feet in 1930 but was plugged back and is now producing from sands slightly below 500 feet.

Magnolia Petroleum Company's Estes 2, SE SW NE of Section 10-5n-9, is drilling below 4500 feet in blue shale without having obtained any showings of importance. This test is scheduled to explore to lower sands known to be present and may rival Mid-Kansas Oil & Gas Company's Preston-Culp 6 for the 1931 record of deep drilling in Oklahoma.

Healdton District

Monarch Petroleum Corporation is drilling below 2600 feet in Gregg 1, SW SW SW of Section 36-3s-4w, approximately one mile west of production in the old Healdton pool. On the other side of the pool Bunn-Marvin Drilling Company is drilling a core test on the Guy P. Cobb farm, SE SE SW Section 11-3s-4w. At the last report it was drilling below 1500 feet carrying three-inch hole which yields a continuous core and permits setting 2½-inch pipe as a producing string should the operator penetrate a sand of commercial importance. This type of core drilling has been popular in Oklahoma during the past year.

Kingston Shallow Area

The regularity with which small high gravity oil wells can be discovered at depths of less than 700 feet has caused the Kingston and Madill areas of Marshall County to be exceedingly attractive, especially to some of the smaller operators. The latter area has been producing a high gravity oil from what are thought to be sands of Trinity age for the past 22 years. Due to the very shallow depths and the relatively small amount of power required for pumping, many of the wells in the district are powered with gasoline motors which use the oil as it comes from the well for fuel.

Hearle and Hudson have resumed drilling after cementing surface casing in Williams 1, SW SE NE Section 24-7s-5e, about one mile northwest of production in the Kingston area. McCrory, McCrory and Frame expect to start drilling at an early date in Whitworth 1, SW SW SE Section 24-7s-5e, about ¾ of a mile northwest of production.

Northeast of Graham

Don Phillips Oil & Gas Company cemented surface casing in Lyle 1, NE SE SW NE Section 28-2s-2w, approximately 1½ miles northeast of the Graham pool in Carter County. Dips along the northeast flank of the Graham pool have been abnormally fast and the new test is located approximately midway between that pool and the Ed Cox pool, indicating that it is located in a syncline and must expect a narrow fold in order to obtain structural conditions favorable for production. The operator completed rigging up rotary tools during the first week in April and the location has been shut down since that time.

Kansas Operators Planning To Build Their Own Outlet

Wichita, Kansas.—Independent operators have under consideration plans for a co-operative pipe line by which several shut in pools in Western Kansas would be given an adequate outlet. At the present time seven or eight pools, some of which have a number of wells and others that have been shut in with only the discovery well completed, are without a market and in some instances have no facilities for marketing. Notably among these is the Schurr-Raymond pool, which has been shut in since the first of the year when Prairie Oil & Gas Company withdrew as a general purchaser. Eleven wells had been completed with the understanding that Prairie Pipe Line Company would take 50 barrels per day from each as long as operators followed a sane development program. This plan went into effect about the middle of the year and the pool had an average daily outlet of 550 barrels until January 1, 1931. Since that time no oil has been run and prior to completion of Prairie Pipe Line Company's line only small amounts had been taken by tank car shipments. Other pools have been less fortunate in that they have had no outlet and very little prospects.

The plan now being considered by Standard Oil Company of Kansas, Slick, Pryor, and Lockhart, El Dorado Refining Company, and Vickers Petroleum Company, is reported to include pools in the Rice, Barton, Stafford Counties area. Although nothing definite has been accomplished it is understood that oil would move to a terminal probably located at Valley Center from whence it could be handled by other lines to plants of the El Dorado Refining Company and Vickers Petroleum Company and to the lines of Standard Oil Company of Kansas.

Opening of a line with this coverage would mean much to Kansas operators, as many believe that the richest finds of past few years are standing shut in with nothing but estimates on their potentials. Structurally the area is important because of its location along the Barton-Chatauqua Arch, now considered to be the predominant structural feature of Kansas. Several structures have been proven by geophysical survey and core drilling and the encouragement of an outlet for some of the completed wells would likely develop a drilling campaign of unknown importance in view of the present economic situation.

The Ritz-Garrett area, with an outlet of only 6300 barrels daily, continues to be the scene of an active campaign which is resulting in rapidly decreasing percentages of allowable production per well. As of May 1, allowable production was set at 10 per cent of unit potential. Completion of additional large wells since that time has materially reduced that figure and one of two things must result within a short time. Drilling will have to be curtailed rigidly in order that completed wells be allowed to produce at an economical rate or outlet will have to be increased in proportion to new completions. Facilities for moving at least 10,000 barrels per day are now available through Shell Pipe Line Company's line and loading rack and Stanolind Crude Oil Purchasing Company's rack.

Looking Over Our Shoulders

By GRADY TRIPLETT

WHAT a blessing it would have been to the petroleum industry if the good luck that has spelled misfortune would have had better spacing. The rich oil strikes of the past five years have each come about two years too early for the prosperity of the industry.

Robert F. Garland went about over Tulsa, looking for someone to undertake the drilling of a lease near Seminole. He was near the end of the list of his possibilities when he came into the office of Arthur W. Duston, geologist and head of the land department for the Independent Oil & Gas Company.

Duston thought well of what others had rejected. The result was the Greater Seminole field. Two years later, Seminole would have been in demand. As it was, the oil industry has carried a burden since those fields brought the air lift and the gas lift into production. Under those stimuli, the Seminole area already has produced the oil, which under former practice, would not have come from the ground until along about 1935.

Before Seminole could get out of the way, there was Oklahoma City. Under the circumstances, Oklahoma City never had a chance to reveal its possibilities. What hope existed for it, had to go under a cloud when the East Texas development came along. Now East Texas oil is moving northward through Oklahoma.

* * *

WORTH remembering.... B. B. Brooks, once governor of Wyoming, speaking before the Interstate Oil Compact Conference in Colorado Springs, June 10, 1929.... The lobby of the Youree hotel in Shreveport when Homer was at its best. .... Closing in the Mary Sudik.... The street crowd in Wichita Falls on Sundays in 1920, when picture shows were a Sabbath violation.... The train trip from Ranger to Breckenridge in 1920.... A blond roustabout eating beans in the Midwest dining room in the Salt Creek field.... The mud sled used for ferrying pedestrians across the street in Burkburnett.... The entry of rotary rigs into the Tonkawa field.... A tank erecting crew held up in Wewoka by an erring "Catus," who soon was found in the town hoosgow....

* * *

FROM the "twenty-five years ago" column of the Tulsa Tribune:

"Dana H. Kelsey, Indian agent at Muskogee, will bear the chief responsibility in the government's final settlement with the nations to be made soon."

JUST to keep the record straight, it is worth noting that the petroleum industry has a peculiar habit of finally embracing what is previously shunned.

When Henry L. Doherty offered his plan of unit development of oil pools to the American Petroleum Institute in 1925, the controversy reached the stage of near combat. Unit development thereafter was a two-word term good only for producing snarls.

Now the petroleum industry has its signal instances of the successful operation of oil fields as a unit and the executives of the larger oil companies would like nothing better than the revision of state laws to allow this method full sway.

Likewise the idea of an interstate compact came before the petroleum industry at Colorado Springs in 1929 and its reception about as warm as would be the proposal to make the Watch on the Rhine the national anthem of France.

But two years have changed the attitude of many, who at least raised no voice of sympathy at Colorado Springs. When the interstate oil compact matter gets its second hearing at Denver in August of this year, there will be a changed attitude from some of the old quarters of resentment.

* * *

RUMORS recently denied concern the merger of Phillips Petroleum Company and Skelly Oil Company with Prairie Oil & Gas Company: the sale of Phillips Company to the Vacuum Oil Company: further dickering between the Prairie and Sinclair Consolidated: sale of the Phillips Petroleum Company to Standard Oil Company (Indiana).

* * *

NOW that Thomas A. Edison has given his word that there is oil beneath the Florida sands, we may expect the formation of the Everglades Oil Company any day. Those who exchange worthless paper for the savings of the incredulous, need nothing better than the words of the wizard of East Orange as a basis for their sales argument.

The inconsistency of the Edison statement came in his reply to the question as to why he did not devise a method for determining the presence of oil and thus remove the necessity for drilling to find it. He said he was too busy finding another source of rubber. This was an admission that no man knows where oil may be found. But those who fleece the stupid will not be hampered by facts. Oil in Florida on the authority of Thomas A. Edison will be sufficient for their purposes.

▼ ▼ ▼

East Central Texas Field Notes

H. H. KING, ***Staff Representative, Fort Worth, Texas***

▼ ▼ ▼

Stanolind Withdrawal Leaves Producers Without Connection

Tyler, Texas.—Withdrawal of the Stanolind Oil & Gas Company, subsidiary of Standard Oil Company of Indiana, as a purchaser of crude oil in the East Texas district effective May 21 has temporarily deprived a number of producers of a market outlet. The above company has been buying 30,000 barrels of oil daily, more or less, to supply the Destrehan, Louisiana, plant of the Mexican Petroleum Corporation of Louisiana, an affiliated concern that curbed imports of South American crudes in response to agitation that took place at Washington a few months ago. East Texas oil purchases for this plant were made at prices ranging from 25 to 40 cents per barrel, with shipments taking place direct via tank cars, or to the Texas Gulf Coast via rail then in barges to the Louisiana refining point. Transportation involved more per barrel than the price of the oil at the well.

Considerable pressure has been brought to bear on Stanolind Oil & Gas Company lately by other major interests in regard to the former having failed to adopt the Mid-Continent gravity scale price in East Texas. Downward revision of the posted price schedule in East Texas having been made, it is expected that Stanolind Oil & Gas Company will resume its purchases to some extent rather than go back to South American crudes in supplying the Destrehan plant.

Stanolind Oil & Gas Company has a 50-car rack in the Kilgore field that is being connected up with the company's various properties so as to handle its own production. The company has a half interest in a number of completed wells and proven leases with Simms Oil Company in the Longview field, and the latter is loading the oil for consignment to the Destrehan plant. This arrangement will continue despite the announced intentions of Stanolind Oil & Gas Company to cease functioning as a general buyer in the district.

Kilgore-Longview Operators Ignoring Proration Rulings

Tyler, Texas.—Ten separate companies and operators in the Kilgore field were producing more oil from wells than authorized by proration rules at the start of the current week. These wells were producing about 34,000 barrels daily, and probably would be yielding considerably more oil if not for the fact that tank car congestion is holding down production to a large extent. Such is true in the Joiner field where 18 separate lease owners are producing 62,000 barrels daily in ignoring all proration restrictions. There are nine tank car rack owners, including producers, engaged in handling the oil produced in the Joiner field in defiance of proration.

The Longview field is faring better, and only reported three companies with any appreciable overage on proration allowance, but this trio accounted for 28,000 barrels daily. Cranfill-Reynolds Company was included in the latter group, but is credited with having since agreed to abide by proration.

Extension of the Kilgore-Longview area into northeastern Smith County appeared very doubtful early this week when Owen-Sloan Oil Company's Starnes 2, Sam Epps Survey, cored into Woodbine at 3800 to 3815 feet, with surface elevation of 357 feet.

Drill stem test at 3800 feet failed to show more than mud and drilling water, and it is very likely that salt water will be produced, as the test is 3443 feet below sea level, or 100 feet below the expected water level.

British-American Oil Producing Company's Ector 1, R. W. Smith Survey, located on Rusk County side of the Kilgore field, flowed 220 barrels oil on 20 minute open casing test from sand at 3599-3615 feet. This well was completed without tubing.

Bottom hole bomb test made recently by Humble Oil & Refining Company's S. S. Laird 1-B, revealed a pressure of 1310 pounds and oil temperature of 155 degrees at 3760 feet. The same company's S. S. Laird 5-A, I. Ruddle Survey, failed to flow and bailed dry from sand and sandy-shale at 3590-3640 feet, and has been deepened to 3678 feet for a second try for production. Tidal Oil Company's S. S. Laird 1, Jas. McKim and Cogswell Surveys, flowed 1197 barrels oil via open tubing during first 14 hours from broken sand at 3681-3723 feet. Gulf Production Company's Birdsong 1, which was one of first big producers in Kilgore field to develop salt water trouble, successfully shut off water as result of plugging back 53 feet from former depth of 3661 feet. The water production amounted to 40 per cent of the total fluid produced before plugging back.

East Texas Operations

Expansion of field work in Rusk and Gregg Counties since the area reached important proportions is illustrated by the table below, showing operations on given dates:

Date	Locations	Derricks and Rigs	Active Tests	Totals
February 9	10	34	34	83
February 16	21	48	54	123
February 23	23	71	70	164
March 2	22	97	84	203
March 9	21	129	104	254
March 16	21	128	136	285
March 23	27	136	194	357
March 30	22	141	222	385
April 6	24	134	231	389
April 13	40	154	223	417
April 20	49	155	231	435
April 27	56	135	259	450
May 4	59	143	240	442
May 11	54	158	246	458
May 18	54	160	269	483
May 25	59	180	296	535

Additional Anti-Proration Suits Filed in Austin Court

Tyler, Texas.—Two additional applications for court injunction to restrain the Texas Railroad Commission from enforcing proration rules in East Texas were filed in Ninety-Eighth District Court at Austin during the past week. H. Read, Amarillo, and associates, sought relief on May 25 through court action, while R. G. McIntyre Drilling Company of San Antonio and associates joined the long list of operators and companies that have tried to enjoin the commission.

These injunction pleas have been accumulating on court records since proration was adopted in the district May 1, but no definite action has resulted in view of the fact that Macmillan Petroleum Corporation et al have a case pending in federal court, and apparently the cases pending in state courts will await the outcome of the federal suit.

Macmillan Petroleum Corporation's plea for relief from proration was up for hearing before a three-judge federal court at Houston, May 21, but it developed that the hearing would require several days, and the judges had other appointments scheduled that made it imperative to postpone the trial. The judges announced that the hearing would be held June 24. While no official word was given out by the court, it is generally understood that the plaintiff is free to ignore proration restrictions during the meantime.

Estimate Shows East Texas 4,000,000 Barrels Daily

Tyler, Texas.—First complete potential production figures on wells in the three areas comprising the East Texas district were compiled by Ray Richmond, chief umpire, and his assistants, as of May 15, showing 528 flowing and pumping wells with a combined daily flow of 941,177 barrels on choke. Actual open flow potential of these wells is estimated at about 4,000,000 barrels daily, but a test will never be obtained for a show down, as facilities are not yet available to handle 500,000 barrels daily. The above official proration potential was largely based on a single hour open flow through 11/16-inch choke, more or less, on 2½-inch tubing. The average flowing well in the district will produce on open flow more than four times the volume of fluid obtainable through 11/16-inch choke on tubing.

The Longview field set the pace on high well averages on potential figures, being given a daily potential of 153,215 barrels from 68 wells, or an average of 2253 barrels daily each. This field is supposed to be limited to 35,000 barrels during the last half of May, but proration violators are responsible for a heavy excess.

Potential daily production of the 230 producing wells in the Kilgore area was placed at 503,112 barrels, or an average of 2187 barrels daily. About 26 wells were given a potential of only 100 barrels daily because of no official gauge having been taken by the umpire, and in most instances involved wells that are disregarding proration restrictions. Kilgore field has been allotted a maximum daily production quota of 60,000 barrels during the last period in May, but is actually producing far in excess of such a figure.

The Joiner area was shown to have a total of 230 wells estimated at 284,850 barrels daily, based on restricted flowing and pumping gauges, and averaged 1238 barrels daily per well on potential. A much larger percentage of wells were allotted a flat figure of 100 barrels daily on potentials and allowance in this area because of failure of wells to flow, deepening, and refusal of owners to recognize proration in any form. The Joiner area is supposed to produce only 65,000 barrels daily, but is actually producing whatever volume of oil can be transported from the field by operators not observing proration restrictions.

Even though the Longview area has been adhering to proration much better than the other two sections of the district, the former greatly exceeded its allowance during the first 15 days in May, according to figures released by Umpire A. B. Capers. Production in the Longview field amounted to 828,405 barrels during the first proration period, or 242,328 barrels more than the authorized proration allowance. Only three companies made heavy contributions to this overage, and the remainder of the surplus was scattered in small lots. Pilot Oil Company, which is largely owned by Tom E. Cranfill, E. B. "Gene" Germany and associates, received a production allowance of 10,635 barrels from its single producer in the field, but is charged with having produced 168,601 barrels overage during the 15-day period by proration reports. Macmillan Petroleum Corporation of Los Angeles received a quota of 16,230 barrels, but during the first proration period exceeded the above figure by 76,065 barrels. Cranfill-Reynolds Company, a unit of the Moody-Seagraves interests, is reported to have produced 98,100 barrels above its quota during the period.

Extension of Longview Production Continues

Longview, Texas.—Production in the Longview field was carried to the east borders of the town of Gladewater, Gregg County, when Humble Oil & Refining Company's D. Johnston 1, J. R. Crosby Survey, tested 155 barrels clean oil per hour flowing through ¾-inch choke on tubing from regular sand horizon at 3599-3617 feet. This well was drilled 3292 feet below sea level. It registered 350 pounds tubing and 370 pounds casing pressure when gauged through the above choke, and when placed on one-fourth-inch choke the pressure on casing and tubing increased 100 pounds.

Completion of a second producer on the Upshur County side of the Longview field was in progress early this week after Fleetborn Oil Corporation's J. K. Edwards 1, D. Ferguson Survey, cored oil saturated sand at 3586-3609 feet. In the south part of the same survey and in Gregg County, Humble Oil & Refining Company's A. Carter 1, has cemented casing at 3545 feet after coring into oil sand at 3561-63 feet, with a surface elevation of 400 feet. The latter is about one mile north of nearest production.

Tyler, Texas.—Field work in the Gregg-Rusk County section of the East Texas oil area advanced to a new record at the start of the current week with 535 operations, including 296 active tests, 180 derricks and rigs, and 59 locations. Gregg County is showing the greatest increase in development work because of the vast amount of virgin territory placed in the positive producing classification by recent completions in the west and northwest part of the Longview field.

Humble Oil & Refining Company is maintaining its leadership on being the most active developer in Rusk and Gregg Counties, having started the week off with a total of 40 operations, while Magnolia Petroleum Company and Gulf Production Company are tied for second place with 27 operations each. These figures do not include completed wells.

EAST TEXAS HIGHLIGHTS

By H. H. KING
Staff Representative

Commission Asks Aid

Faced with injunctions seeking to restrain it from enforcing its orders, and with the big task of dealing with the numerous operators in the East Texas field, the Railroad Commission of Texas on May 23 issued an appeal for cooperation on the part of all purchasers and transporters of crude, pointing out that those concerns can aid materially in proration enforcement. Following is the letter, signed in the name of the commission by R. D. Parker, chief supervisor of the oil and gas division:

"To all purchasers and transporters of crude oil in the East Texas fields:

"To anyone acquainted with the situation in the East Texas district it seems inevitable that present conditions cannot continue long without completely breaking up proration, with consequent disastrous results.

"Several things if done would insure success and we confidently believe can and must come from the purchasers and transporters of crude oil who handle the bulk of the production of Texas. Believing this, we insistently urge prompt action in the form of fair offers to buy prorated oil in substantial amounts and as near the posted price as possible and on that stabilized basis only, and immediate offers to make the necessary connections to take the oil. The effect of such a course is plain. Some purchasers have been holding back, we understand, to see whether proration is going to work, or for some such reason or fear. It is manifest that if a substantial number stand and wait, the movement must certainly fail for want of support.

"We also earnestly request of purchasing companies that only oil be purchased which has been produced in conformance with the commission's order governing proration in East Texas, and we ask that transporting companies refuse to handle any oil not produced strictly in accordance with the provisions of our order.

"The Railroad Commission, hoping to be of real constructive public service, has given its support to proration as an official duty to perform, and will continue to do so until forced by circumstances to abandon hope of success. We urge you, therefore, to promptly and effectively move at once or we will be forced to admit failure and abandon the whole plan in Texas."

Humble Moving Oil Through Line

Humble Pipe Line Company during this week and part of the past week has been moving approximately 20,000 barrels of crude daily through the new eight-inch extension line which it recently finished building from Boggy Creek field into the Joiner and Kilgore areas of East Texas. From those producing districts the crude is transported southwesterly through the new line to Boggy Creek and thence in the same direction through an older line to a point near Groesbeck, Limestone County, for delivery into the company's trunk line system which extends via Hearne to the Gulf Coast.

The new eight-inch line is routed into the Joiner district from the southwest, with an electric pump station, designated as Arp station, located in Joiner field on the Kangerga land, slightly southeast of the center of the M. J. Pru Survey. From that station the eight-inch line continues northerly to Bateman station on Muckelroy land, north part of John S. Caruthers Survey, Kilgore field.

From the latter station an eight-inch line extends to Longview station, adjacent to the southeast corner of Longview city limits, connecting with Humble Pipe Line Company's 10-inch carrier from Van field to the Texas-Louisiana state line. Through that outlet from Kilgore the company has been pumping about 20,000 barrels of crude daily.

Gulf Upholding Proration

Aside from handling production from leases of Gulf Production Company and of that concern's associates, Gulf Pipe Line Company has for some time been following a policy of buying East Texas crude also from other producers, having made its original posting late in April. Effective May 26 Gulf Pipe Line Company met the reduced price schedule for East Texas crude which had been posted by Humble Oil & Refining Company. In taking oil from the new East Texas field Gulf Pipe Line Company is cooperating with the Railroad Commission of Texas by complying with the latter's request that purchasing and transporting companies buy and move only oil which has been produced in conformance with the commission's proration order. It is reported that Gulf Pipe Line Company has lately been handling approximately 20,000 barrels of East Texas crude daily. The short eight-inch connection which the company has from the Kilgore and Joiner district to the main line system traversing Smith County affords facilities for handling as much as 35,000 barrels of the East Texas crude per day.

Men taking part in work on Arkansas Pipe Line Corporation's recently completed East Texas trunk line included: W. S. Bibb (in shirt sleeves), who was actively in charge of work for the construction contractors, Ford, Bacon & Davis. He is facing L. B. Babcock, one of Arkansas Pipe Line Corporation's engineers.

Jackson, Miss.—Industrial Gas & Electric Company's Illinois Central 1, NE SE Section 4-5-1e, a mile west of Hinds County gas producing area at Jackson, completed late Monday in chalk at 2468 feet, making estimated 25 to 30 million cubic feet of gas. Midway chalk was topped at 2463 feet where 6⅝-inch casing was set. Midway shale was topped at 2360 feet. Elevation is 280 feet. It is in the heart of the Jackson business area.

Nothing Encouraging During Week in Northeastern Texas

Shreveport, La.—Another failure was added to Harrison County, East Texas, tests for the Woodbine sand, during the past week when William Atkinson's Hays 1, J. C. Chappin Survey, northeastern Harrison County, was abandoned as a dry hole at total depth of 2875 feet with 25 feet of Georgetown lime. This test had tested dry previously in Blossom sand encountered at 2430 feet.

An old test antedating the Rusk-Gregg discovery, in Marion County, was junked and abandoned during the past week, this being Trammell and associates' Hussey 1, Charles Lockhart Survey, which had shown a trace of oil in lime formation two feet above bottom at 1878 feet. Elevation was 282 feet and 8¼-inch casing had been cemented at 1514 feet. In west Harrison County, Banner as associates have delayed bailing of Lowrey 1, W. O. Stanfield Survey, which reported a core of oil sand in the Blossom from 2797 to 2805 feet, 6⅝-inch casing being cemented at top of the sand. Plug was drilled during the past week and the test shut down to repair a boiler.

One new location was announced for a wildcat in Panola County, this being J. L. Nelson's Williams 1, James Hanks Survey, nine miles north of Carthage. A 122-foot derrick has been erected for a test on a 14,000-acre block.

Late last week Sloane Prospecting Company's Windham 1, A. H. English Survey, Shelby County, which had shown oil in 22 feet of Blossom sand only to have salt water appear when the test bailed down 1700 feet at total depth of 2680 feet, later bailing dry to bottom with a small show of salt water, was drilling sandy shale at 3010 feet. Contract depth is 4000 feet.

Grayson County Test Makes Gas From Shallow Horizon

Wichita Falls, Texas.—Shallow gas production rated at about 3,000,000 cubic feet daily has been developed at the 400-foot horizon in northern Grayson County and near the east bank of Red River by the F-H-E Oil Company's wildcat test on the H. C. Potts farm, I. Southward Survey. This new strike is about seven miles northwest of the Pottsboro shallow gas field, and on a direct line between the latter and oil and gas production in Marshall County, Oklahoma. A string of casing has been cemented above the gas horizon to make a production test before drilling deeper.

Deep Oil Development Company's Hirschi 1, located in the Hirschi pool in northern Wichita County, has been ordered abandoned after encountering sulphur water in the Ellenberger lime formation, which was topped at 5827 feet, and drilled to a total depth of 6002 feet. This is the deepest hole in the county, and was the first of a group of deep tests launched last spring by the above company, which has in the meantime uncovered new deep oil horizons in southwestern Wichita County and west central Archer County.

Ranger, Texas.—Lasater and associates' wildcat test on T. & P. Railroad land in south central part of Palo Pinto County is flowing sulphur water, testing 164 degrees temperature while drilling below 5353 feet. This wildcat test is located near center of south line of Section 5, A. B. & M. Survey, Abstract 21, and is one of the deepest tests in the county.

Aransas Pass Area Becomes Important Oil Shipping Point

Port Aransas, Texas.—Reaching the 100,000,000-barrel mark in crude shipments since its inception several years ago, Port Aransas port district has gained a major position among the oil exporting points. So great has been the tonnage during the past two years that the Aransas-Corpus Christi channel is being deepened to 33 and 32 feet, respectively, giving it a full Grade "A" rating.

While this port has been opened to traffic since September 14, 1926, the bulk of the crude exportation has been recorded since September, 1928, or less than two and one-half years. Since the latter date, the port has been materially enlarged, the most recent expansion giving it the draw of a major port.

Standard Dredging Company is now dredging the channel to a depth of 32 feet in sections 1 and 2 and 33 feet in sections 3 and 4. The channel is to be 200 feet wide.

The Aransas Harber Corporation of New York City (Munsill interests) has made application for a permit to construct a bulkhead 1200 feet long along the north side of Corpus Christi channel on Harbor Island. The bulkhead would be at the outer or east end of the channel, opposite the present loading area at Port Aransas. The plans call for a 250-foot wharf, 20 feet in width and to be built along the bulkhead. The area in front of the bulkhead would be dredged to a depth of 32 feet.

The sale of the Gulf Coast Pipe Line system by Moody-Seagraves-Morgan interests to Atlantic Pipe Line Company, February 1, for a consideration of $4,000,000, and its subsequent development at the Port Aransas terminus, is another instance of the unusual activity at this oil terminal.

Humble Oil & Refining Company has a refinery at Inglesides, portion of the Port Aransas-Corpus Christi district, from which finished products are transported via tankers.

Figures recently released by L. M. Adams, director of ports, at the close of 1930, showed the entire district, including Corpus Christi, Ingleside and Port Aransas, to have handled a total of 14,679,877 tons since the channel was opened for traffic on September 14, 1926. Of this amount, Corpus Christi, which handled general cargo, mainly cotton, totaled 988,493 tons. The remainder was oil and oil products from the immediate vicinity of Port Aransas. From these figures, it is evident that practically all government aid received for the development for this district has been prompted from oil tonnage.

The major part of the tonnage has been from the Humble Pipe Line Company's docks at Port Aransas. Aransas Harbor Company, however, has played an important part in bringing the all time tonnage record of Port Aransas at the close of the year to 9,516,271 barrels. The former was opened on September 21, 1928, while the latter did not start shipping oil until August, 1929.

The oldest, yet the most inactive port at this time is at Inglesides, several miles from Aransas, which has an all time tonnage record at the close of the year of 4,175,113 tons. This port was opened in November, 1926. This port is operated by the Humble Oil & Refining Company, which is not particularly catering to crude exportation at this time, but to the transportation of distillate and refined oils.

South Texas Field Developments

EARL POST, ***Staff Representative, San Antonio, Texas***

▼ ▼ ▼

Expect Bee County Gas Well Later to Begin Flowing Oil

San Antonio, Texas.—Gulf Coast Oil Company's (Moody-Seagraves) McKinney 2, northern Bee County, has been completed as a large gasser, showing 1100 pounds pressure, at a total depth of 3730 feet. The well topped the sand at 3715 feet. It is possible that the well will start spraying oil when the pressure shows a slight decline, as did McKinney 1.

The well is located 500 feet west of a line between Moody-Seagraves Producing Company's McKinney 1, a gasser spraying about 20 barrels of oil daily, and United Production Company's Ray 13, originally completed as a 500-barrel oil producer. All three wells are located in the George Habbermacher Survey and are three miles north of the main Pettus pool.

In the Ray-McKinney or discovery pool of Pettus, United Production Company has abandoned Ray 38 at 3979 feet. It showed salt water in the regular horizon, which was topped at 3973 feet. The well is 900 feet due east of production and is in the T. Hanson Survey. One mile farther east, Ray 37 is making hole at 2158 feet. This well is located in the Willis A. Moore Survey.

Two Bee County wildcats are preparing to spud in. Grebina and Woods' Riggs 1, 6½ miles west of Skidmore in the James Nowland Survey, and Davis et al's George Ray 1, one mile south of Pettus townsite, should begin operations within a few days, rigs already having been set up.

Nueces County Gas Well Runs Wild, Sprays Oil

San Antonio, Texas.—Nueces County's prospects of having an important field were more pronounced last week by the Houston Oil Company's Harrel 2 (originally Thompson Lawrence 2) when it blew in wild May 19 as a huge gasser spraying oil at 2725-40 feet. The well was still running wild late May 25 with little or no hope for its control for some time.

Completion of this well established another producing horizon for the field and brings the total oil or gas levels already opened to seven.

The test was completed last year by R. A. Thompson and associates as a gasser, making 20,000,000 cubic feet, in a sand at 1659 feet. It opened what was thought to be an entirely new gas field at the time, several miles northwest of the Saxet field of Nueces County. The well is located 1500 feet from the same operator's Lawrence 1, which blew in wild in July, 1930, at this level and cratered, caught fire and later choked itself in. It is in the southwest corner of the John Dunn Survey No. 312, about two miles northwest of the main producing area of the field. When the development came to the Saxet field, Houston Oil Company purchased the producing properties and several days ago decided to deepen the test.

Since completion of the Thompson well last summer, Kepley Production Company drilled Donigan 1, one mile to the east, to 2437 feet, where it made a large dry gasser. Farther west, Bess et al's Boorey 1, was completed as a large gasser spraying oil at slightly below 4000 feet. These tests placed Houston Oil Company's property in virtually proven territory and an effort was made to find the lower producing horizons.

When the well was drilled to 2740 feet, the well started to blow, throwing 1700 feet of the drill stem from the hole and in a few moments causing the 124-foot steel derrick to topple over. Three men were overcome, but shortly revived without injuries. The estimates on the flow of gas ranging from 60,000,000 cubic feet upward.

L. L. Smith, Inc.'s Hunter 1, three-fourths of a mile east of the main producing district in the Rincon del Osa grant, showed salt water in a sand cored at 3716 feet and is drilling deeper. Saxet Oil Company's Dunn 8, 1000 feet north and east of Dunn 7, showed five fourbles of oil and no water on a drill stem test made of a sand at 4277 feet and is setting casing for a test. Gulf Coast Oil Company's (Moody-Seagraves) Harrell 1, 3-4 mile north of production on Block 32, Section 311, G.C.&S.F. Survey, showed 600 pounds of dry gas in 10 minutes on a drill stem test of a sand at 4084 feet. Houston Oil Company's Morgan 2, which originally was completed as a producer at 4095 feet, is being drilled deeper. At last reports, it was in sticky shale at 4365 feet.

San Antonio, Texas.—A small Edwards lime field in Caldwell County loomed as a possibility as Ralph Ogden et al's O. S. Alexander, 10 miles southeast of Lockhart, topped the Edwards lime at 2330 feet, showing saturation. The well was sunk eight feet into the Edwards, where it was stopped for a test.

The test is located 450 feet north of Foster-Reiter Oil Company's Alexander 1, which showed a little oil in the Edwards at 2460 feet. The difference in the logs of the two wells indicates that the first test was a downthrow.

Mirando Deep Test Drilling Deeper After Showing Water

San Antonio, Texas.—Duval County is getting one of the most interesting deep tests ever drilled in the Mirando district. It is Humble Oil & Refining Company's Kohler 50, in the Kohler field, now drilling below 6100 feet. The well is located 2805 feet from the south line and 160 feet from the west line, Survey 164.

This test recently had a showing of oil in a series of sands encountered from 6009 to 6087 feet and a 9⅝-inch casing was run to 6021 feet. When drilled in, the well showed salt water and is being carried deeper. At 1860-87 feet, the well had its only other sand with a showing, that horizon showing salt water and oil on a drill stem test.

Recently the derrick floor was elevated to 15 feet above the ground and the last string of casing has been cemented solidly from top to bottom. A cement block has been set around the top of the casing and the cellar.

The preparations being made for further operations indicate

that Humble Oil & Refining Company might try its luck at drilling a real deep one.

San Antonio, Texas.—Having failed to make a producer in its well 900 feet north of the discovery, Carsil Oil & Gas Company will move onto a location to the south of its McGill 1, Jim Wells County, for a try. The McGill 1 blew in several months ago from a sand at 2683-89 feet and ran wild, making 50,000,000 cubic feet of gas with a high pressure. Before the well was finally controlled, it began flowing salt water and was plugged to prevent damaging the sand. The second well failed to find the formation and was abandoned at 3004 feet.

The wells are located on the William D. Baldwin Survey, three miles north of the townsite of Armagosa and 12 miles southwest of the gas field opened by Larcro Gas & Petroleum Company's Wade 1.

United Gets Large Gasser In Deep Sand at Refugio

San Antonio, Texas.—The United Production Company completed a large gasser in the Refugio field's deep sand this week. It is the O'Brien 9, which is showing about 1900 pounds on the tubing and 2100 pounds on the casing from 6462 feet. The well is producing through the customary one-fourth-inch choke. It showed some oil when first completed, but was stopped by the pressure.

The same company's Fox 1-A, which was completed recently for an initial production of 750 barrels from 5778 feet, has been increasing its flow and is now making better than 1000 barrels daily through a one-fourth-inch choke, rating it as one of the field's best wells.

Several more wells are in process of completion in the deep sands.

Slick Estate Gets Gas Well In Victoria County Extension

San Antonio, Texas.—A new gas field has been opened in Victoria County or three-mile extension has been provided to the McFadden field by Slick Estate's McFadden 1, which is showing for a large gasser at 3502-3507 feet. The well is in the J. Barian Survey, three miles northeast of Lion Oil Refining Company's production. It is 17,700 feet northeast of the southwest corner and 5100 feet northwest of the southeast line of the survey.

The test showed 650 pounds pressure in three minutes on a drill stem test through a ⅜-inch choke. Casing has been set on top of the pay and will be drilled in within a few days.

This is the first test to be drilled on an 8000-acre block held by the Slick Estate.

The wells in the McFadden field, discovered last year by Lion Oil Refining Company, are producing from around 3750 feet.

Barge Derrick Foundation Expected to Lower Costs

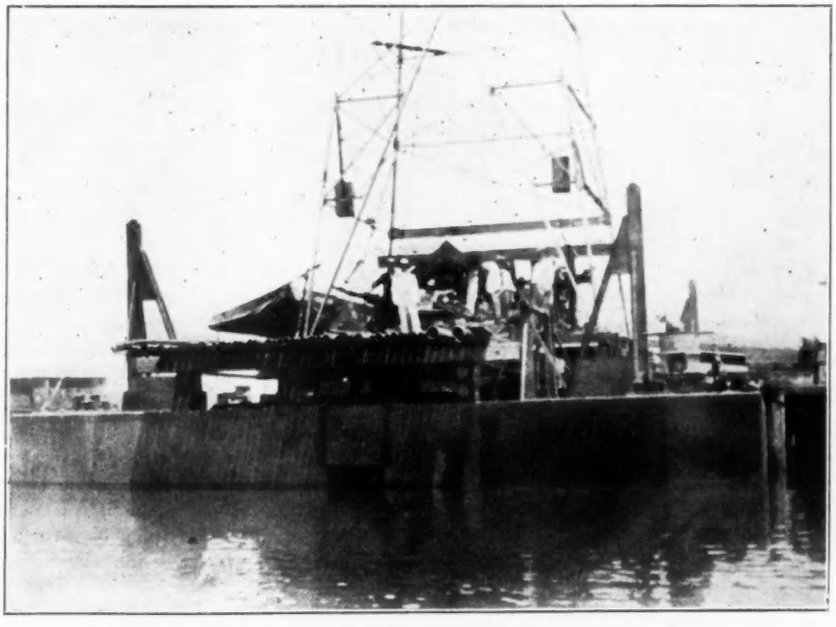
New Orleans, La.—A reduction in costs and speeding up in operations is anticipated by the Jefferson Lake Oil Company from the use of a permanently rigged up derrick on a steel barge on its initial test at Lake Peigneur, Jefferson Island salt dome, Iberia Parish, Louisiana. The rig had been completed and the poles for power line connection were being placed in the shallow lake waters at time of the accompanying photo which shows the barge and rig.

The company has drilled a number of wells in the bed of Lake Peigneur, leased from the State of Louisiana.

In its operations, the company found the driving of piling, placing of platforms thereon, and the erection of the derricks with men working in the shallow waters not only expensive in material and labor, but in time. The field superintendent, Ed. Laguere, who has been in charge of the operations since 1926 and prior to that was a drilling contractor in the Gulf and Mid-Continent fields, determined to find a method of reducing costs.

The answer is a steel welded barge 60 x 40 feet, and 5½ feet in depth, having a slot down the middle to a point past the center to slip away from the casing of a completed well. The derrick, a 67-foot Lee C. Moore tubular, is permanently rigged, with the machinery to be operated by electricity, the electrical equipment being given the advantage of safe housing from the elements.

The barge will be securely anchored in place by four heavy pipes, one at each corner. The barge, which is of quarter-inch steel, was erected on the banks of the lake. On completion it drew nine inches and now draws 21 inches. The depth of water in the lake, which was originally without an outlet being formed by subsidence due to action of water on the underlying salt dome, is controlled by a dam spanning a drainage canal.



Derrick bearing barge for drilling at Lake Peigneur, Louisiana

Gulf Coast Field Developments

JACK LOGAN, ***Staff Representative, Houston, Texas***

▼ ▼ ▼

Record Deep Well at Sulphur Makes Producer Plugged Back

Houston.—Union Sulphur Company's Fee 762, Sulphur field, Calcasieu Parish, has proven one of the most interesting wells in the Gulf Coast territory in being completed last week as a producer at 5080 feet. The well came in for an initial flow of 1400 barrels of oil through one-half-inch choke.

This well made a producer last December, coming in for initial of 850 barrels of 18 gravity oil at 4789 feet. Production of the well ceased the first part of January, 1931, and it was drilled deeper in an effort to pick up another sand. A few slight shows of oil were encountered but none of the sands were considered favorable for commercial production and the hole was drilled to a record-setting depth for the Gulf Coast area of 9250 feet. The test was temporarily abandoned at that depth on April 28, 1931.

Operations on the well were resumed the following week and a whipstock was set for sidetracking through the casing at 5009 feet. An oil sand was picked up at 5064 feet and the operators set 417 feet of 6⅝-inch casing up into the other casing. The well, after several feet of sand had been cored, made a producer from 16 feet of sand. Gravity of the oil at this new producing level is approximately 26 degrees.

New Field Opened on Gulf Land in Fort Bend County

Houston.—Cullen & West's Lockwood 1, discovery well of the new Thompson field, Fort Bend County, has been closed in and is waiting for further storage to be built. One 1000-barrel tank already built on the location has been filled and two more tanks of the same capacity will be built for handling the oil until pipe line connections can be made with Gulf Production Company's Big Creek line. The Big Creek line is about seven miles north of the new producer.

This new field, which was opened May 20, is situated on a 7000-acre block owned by Gulf Production Company and Cullen & West. Geophysical surveys of the prospect were made by Gulf Production Company. A number of shallow gas wells and seepages have been in existence in the field for several years.

Lockwood 1, a rank wildcat owned jointly by Cullen & West and Gulf Production Company, is located three miles south of the town of Thompson, on a 583-acre tract, 475 varas east of the west line of the east half of the survey and 1275 varas south of the north line of the John Robb Survey, and about eight miles south of the Sugar Land oil field.

The well came in for an estimated initial flow of 3000 barrels daily at 3089 feet. Production was started after 30 feet of 6⅝-inch screen had been set on the bottom of the hole with 12 joints of 6⅝-inch blank liner and 4¾-inch liner set to the surface. The gravity of the oil is 24.5 degrees. The first production of the well was flowed through one-half-inch choke, and further pinched in later with a one-fourth-inch choke, the well flowed 800 barrels of oil daily, registering 450 pounds pressure.

Location has been made by Cullen & West and Gulf Production Company for a second test, 1300 feet south of the discovery well.

Louisiana Coast Drilling Reduced to Low Proportions

Houston.—Completion of three wells in the Louisiana Gulf Coast area during the past week left a minimum of active tests drilling in the proven and wildcat territories. Union Sulphur Company completed Fee 762, in the Sulphur field, for 1400 barrels at 5080 feet. A. V. Peters' Smith 1, in the Welsh field, Jefferson Davis Parish, was barely listed in the producing class when it was put on the pump at 1160 feet making 10 barrels of net oil; 80 per cent of the fluid was salt water. Pure Company registered the third producer for the week with the completion of Yount-Lee 10 in the Sweet Lake field, Cameron Parish, for 1150 barrels at 7387 feet.

Yount-Lee 10 was only 63 feet short of the deep producing record set by Yount-Lee Oil Company's Houssiere Latrielle 8 in the Evangeline field, that well having made a 2000-barrel producer at 7450 feet.

The small amount of active wells left in the Louisiana Gulf Coast territory give little indication of any important developments during the coming week. There is a bare possibility that producers might be made of Standard Oil Company of Louisiana's Gay 1 in the Choctau Bayou field, Iberville Parish, which has hit a good show of oil at 4304 feet. The Texas Company's Caillou Island 6, Terrebonne Parish, has cored an oil sand at 4486 feet. This is the sixth test drilled on the prospect, all the others having been abandoned without having encountered any favorable shows.

Vacuum Oil Company's Cameron Meadows 2, located 500 feet south of Cameron Meadows 1, the discovery well of the Cameron Meadows field, Cameron Parish, is drilling at 3750 feet in rock. This test is 100 feet short of the depth at which production was found in the discovery well.

Houston.—Rio Bravo Oil Company brought in Settegast 21-A, Pierce Junction field, for an initial flow of 2500 barrels from 4255 feet. The production is flowing through five-eighths-inch choke, registering 500 pounds pressure. Gravity of the oil is 29 degrees.

This producer is located 400 feet south and 200 feet west of the northeast corner of the "A" lease in the J. Koffman Survey No. 44. The well is producing from 50 feet of sand, the top of the sand having been encountered at 4205 feet. After the first show of oil was hit at 4205 feet the operators set 6⅝-inch casing and drilled on into the sand to 4255 feet before setting 55 feet of 4½-inch screen.

Louisiana--Arkansas Field Notes

Show May Mean Extension Of Production at Urbana

El Dorado, Arkansas.—A quarter-mile eastern extension of the Urbana district of Union County appeared likely during the past week when Marine Oil Company's P. Winn A-2, NW NW Section 11-18-13, coring an oil sand from 3582 to 3586 feet and cementing 6⅝-inch casing for a test at 3579 feet, total depth being 3586 feet. The preceeding week Wilson & Chapman's Ned Parker 1, NW SE Section 3-18-13, a half mile north of production had shown oil in a drill stem test, with sand from 3561 to 3565 feet, and the same type of casing was cemented during the past week at bottom of the hole.

Two wildcats, one in Pope County, northwest Arkansas, and the other in Miller County, southwest Arkansas, were abandoned during the week. Arkansas-Louisiana Pipe Line Company's Baird 1, SE NW Section 11-7n-20w, Pope County, was abandoned as a dry hole in black shale at 4231 feet. In Miller County, Bullock Oil Company's Hervey 1, Section 33-14-26, was junked at 2832 feet in gummy lime with streaks of red beds.

Aside from four recent locations in Urbana, Miller County secured the only new Arkansas location during the week. W. E. Noel and associates made location for Dickson 1, NW NE Section 11-20-27, on an 8000-acre block, part of which extends south into Caddo Parish, Louisiana. Contract depth for the test is 3500 feet.

Modisette and associates are preparing to set eight-inch casing in Sharklee 1, SW NE Section 33-16-19, Columbia County, a wildcat, at 960 feet. Hole is reported heaving.

Lion Oil Refining Company and associates' Guy P. Hayes A-9, SW NE Section 4-16-15, Union County, Smackover's first 5000-foot test, was drilling shale with streaks of sand at 3480 feet late last week.

Report Oil Show Eight Miles North of Zwolle

Shreveport, La.—Eight miles north of Zwolle townsite production and on what is believed to be a fold between Zwolle and Pleasant Hill oil field, J. J. Kean during the past week topped what was identified as Zwolle marl at 1590 feet and is arranging to set eight-inch casing at 1600 feet, after taking a core which he said showed oil, in Belton 1, SE SW NE Section 31-9-13, Sabine Parish.

Although Zwolle failed to add a producer during the week, the southeast part of the field which is the scene of the largest drilling campaign at present under way in North Louisiana, secured four new locations. These tests are: Hawkins and Antton's Newton 1, Section 1-7-11, spudded; Zeke Lohman's McCormick 1, NE SW Section 2-7-11, derrick; A. F. Tarver's Cutrer 1, NW NW Section 12-7-11, rig; and Sabine Royalties Company, Incorporated's Bill Hill 2, SW SE SE Section 5-7-11, derrick.

After encountering a good gas show in a sandy shale identified as the Tokio and being located on the eastern slope of the Sabine Uplift, Jamestown Syndicate which several weeks ago found a collapsed casing after bailing down 1600 feet, has abandoned a fishing job and junked Lawhon 1, SW NE Section 15-16-8w, Bienville Parish, a wildcat test. Between the Haynesville and Shongaloo fields, Red Hawk Oil Company's Matthews 1, SE NW Section 11-23-9w, Webster Parish, was also junked and abandoned at 2797 feet. This test had encountered a broken formation showing oil from 2782 to bottom of the hole and six-inch casing was cemented at 2764 feet. After bailing down 2400 feet with a small show of oil casing collapsed. Chalk was topped in the test at 2480 feet.

Richland Parish's gas field added a 32,796,000-foot gasser in Southern Carbon Company's Thomason B-2, Section 23-16-6e, at 2442 feet, and Hope Production Company spudded a new test in that field, Noble 3, Section 1-16-5e.

Shreveport Geologists Plan Trip to Salt Domes

Shreveport, La.—Having changed their plans to visit northeast Texas on the annual field trip, the Shreveport Geological Society, embracing petroleum geologists in North Louisiana, South Arkansas, and East Texas, has now decided to visit salt domes in Bienville and Winn Parishes of North Louisiana, June 6-7, according to announcement by G. W. Schneider, secretary. Both domes provide good examples of typical topographic salt dome development and the Prothro dome in Bienville Parish has exposed the section from the Sparta down to the Blossom. Cap rock is exposed at the surface of the Winnfield dome in Winn Parish, and diamond cores, showing the section from the surface into the salt on the latter dome, will be available for observation.

If work on the shaft has progressed sufficiently, a trip into the mine of this dome is planned. W. C. Spooner, Shreveport geologist, who is familiar with Louisiana salt dome problems, will conduct the party into the field.

The trip will be made by bus leaving Shreveport at 3 p.m., June 6, with a stop that evening at Natchitoches for a fishing side trip. Reservations must be made with Secretary Schneider before June 1. The society invites all members of the profession to join the members on this trip.

Granada County Test Abandoned as Failure

Jackson, Miss.—Carter Oil Company has abandoned Dubard 2, SE NW Section 18-22-4w, Granada County, as dry at the contact of the Eutaw and Tuscaloosa formations at 3023 feet. This test is 300 feet east of Dubard 1 in which gas showings were reported between 2924 and 2966. The second failure is taken to indicate the probability that the showing of the first was the result of some hydrostatic condition, as the last test was cored from 2929 to 3023 feet with no sign. From 2929 to 2944 feet the cores showed a greenish gray salt water sand; to 3005 feet was sand and from that point to bottom a sandy shale, at the bottom streaked with red gumbo, indicating the contact.

Dixie Petroleum Company's Pat Henry 1, SE NE Section 36-17n-4e, Warren County (Vicksburg district), has been abandoned at 2297 feet, in sandy shale.

George R. Thompson, trustee, has announced location of Donahue 1, Section 25-16n-17e, Noxubee County, in northeast Mississippi. The test is on a 30,000-acre block and a second test is planned. Rotary is to be used to the Paleozoics and then cable tools.

B-M-W PRODUCTS for pumping wells
The KEY to LOWER LIFTING COSTS
CORRECTLY DESIGNED .. ECONOMICALLY PRODUCED
REASONABLY PRICED

"NON-KRO ADMORE Liner Barrels working fine"

One large oil company writes, in part, as follows: "NON-KRO ADMORE Liner Barrels working fine. No tubes have cut out. Some in wells as long as seventy-five days where plain tube would last from three to five days."

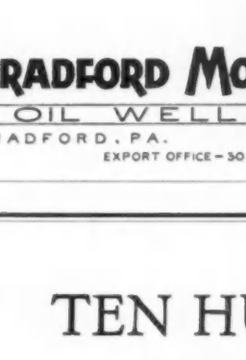
CHROMIUM PLATING as applied to B-M-W Seamless Steel Working Barrels, ADMORE Liner Barrels and Outside Tubes for ADMORE Liner Barrels is a revelation in long wear because NON-KRO represents perfect plating.

Ask your Supply Store—give these units a fair trial and be convinced of their economy and fine performance and long life.

BRADFORD MOTOR WORKS INC.
OIL WELL SUPPLIES
BRADFORD, PA. TULSA, OKLA.
EXPORT OFFICE—30 CHURCH ST.—NEW YORK CITY

TEN HUNDRED LAUGHS

By JUDGE RAY SCRUGGS



A veritable encyclopedia of fun and humor. Contains a number of darkey stories and stories of the South.

Contains a comprehensive collection of choice anecdotes and stories, compiled by Judge Scruggs after many months of research.

Bound in Castillian cover; thoroughly classified and indexed. Postpaid, $2.00.

Send check to

THE GULF PUBLISHING COMPANY

P. O. Box 1307 Houston, Texas

Sinclair Plans Line Tunnel Under Houston Ship Channel

Houston. — Sinclair-Texas Pipe Line Company has been granted permission by the Harris County Navigation District to build a pipe line tunnel under the Houston Ship Channel for connecting its refinery with the 12-inch line from East Texas.

Plans of the new project were based on a former experiment of the company in tunneling under the Chicago River or ship canal to East Chicago, Indiana. Although the former tunnel was about one-half the magnitude of the proposed project it is thought that the estimated cost of the tunnel will be approximately $100,000. The tunnel will be approximately eight feet square when finished and will be about 600 feet long. Tests made of the soil in the bed of the channel make it necessary to build the tunnel not less than 70 feet below mean low tide.

The construction of the tunnel, which is to be built of reinforced concrete, will be undertaken by the Subway Engineering Company of Chicago. This same company also built the tunnel under the Chicago River for Sinclair Pipe Line Company.

The tunnel will be ready for use within the next three or four months. The line from East Texas is expected to be completed in about 90 days and there will be a 12-inch line from the Houston refinery to Huffman station, Harris County, on the trunk line system out of East Central Texas.

Montgomery County Offers Bonus for Oil Production

Houston.—Drilling activities in Montgomery County have been stimulated by the announcement that a bonus of $10,000, subscribed by the citizens of Montgomery County and Conroe, will be given for the first oil well in the county which will produce 100 barrels daily for 60 days.

This announcement has brought renewed efforts on the part of the operators of the old Kelly-Baker test, Juergus 2, now owned by Turner and Kelsey. This test is drilling below 3900 feet in shale. Mike Hogg has taken over Lake Creek Oil Company's J. S. Hunt 1, three miles southwest of Conroe, and has rebuilt the derrick and put in a rig with three boilers. The test is drilling in shale at 2100 feet.

A third test is going down on the Sunday farm, about nine miles southwest of Conroe and four miles north of Pinehurst. Sunday 1 of Lowrie & Young is drilling at 600 feet.

Houston.—Orange County registered a failure last week with the abandonment of the wildcat test, Mansfield 1 of Crews Oil Company. The test was finally abandoned in shale at 1412 feet after rigs had been changed and the well had been washed to the bottom.

This test is located about five miles east of Beaumont, Texas, and south of the William Stephenson Survey. It is 3500 feet west of the east line and 300 feet south of the north line of the J. W. Hill Survey.

Cheyenne, Wyo.—Prairie Oil & Gas Company of Wyoming is preparing to drill a test on the old Warren ranch west of Cheyenne. Company has a solid block there of more than 30,000 acres. The structure to be tested was located by geophysical instruments.

INTERNATIONAL PETROLEUM
IN REVIEW

Line fight in the Singu field, Upper Burma. Both rows of wells were drilled (at staggered locations) by Burmah Oil Company to protect its boundary from drainage by offset competition

European Production Increasing Steadily

Preliminary estimates, based on official Soviet production quotas for 1931 and on actual production during the first quarter in Roumania, Poland, Germany, and elsewhere, indicate that European oil production will climb to a new high record during the current year. If Azneft and Grozneft oil trusts attain the statistical goals set for them, as they have done since the commencement of the Five Year plan, there appears to be every prospect that European output will approach a record total of 250,000,000 barrels during 1931.

This represents an increase of 35 per cent over the total for 1930, and of 75 per cent over 1929. The accompanying chart shows that European production has increased by 140 per cent during the period 1925 to 1930, during which the oil producers of the United States achieved a net total increase of only 17½ per cent. If one accepts the best available estimates for 1931, this discrepancy will appear even more glaring, with an increase of approximately 226 per cent in favor of European producers, whereas, unless American output should increase substantially above the average of January to April, it is likely that 1931 will register another decline in annual output.

American production declined by 12 per cent from 1,007,598,000 barrels in 1929 to 898,000,000 barrels in 1930; and, unless the monthly average of 66,875,000 barrels referred to above should be exceeded, the total for 1931 will fall to 802,500,000 barrels. However, H. J. Struth, petroleum enonomist, of THE OIL WEEKLY, estimates that a total of approximately 850,000,000 barrels of new production will be required to satisfy the demands of the American market during the current year; and, with potential production so far in excess of actual, and with the new East Texas fields coming on, it is likely that this latter figure will be reached or surpassed.

The world is well informed by now of the remarkable increases in Russian oil output; but it is not so generally known that the oil producing countries of Western Europe are also increasing their output very materially. Despite the decline

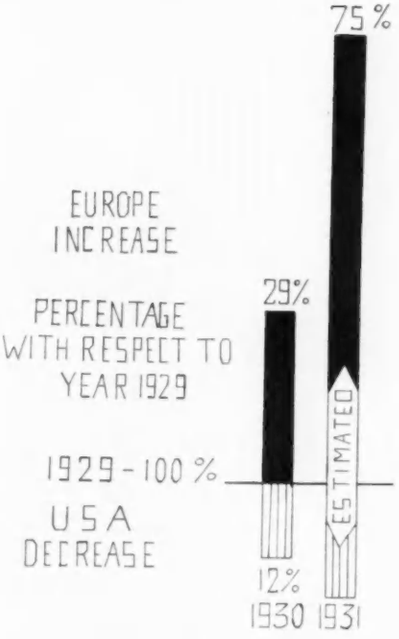


Chart showing percentages of increase in European fields, and of decrease in oil fields of the United States, during years 1930 *and* 1931 *(estimated), as compared to totals for* 1929

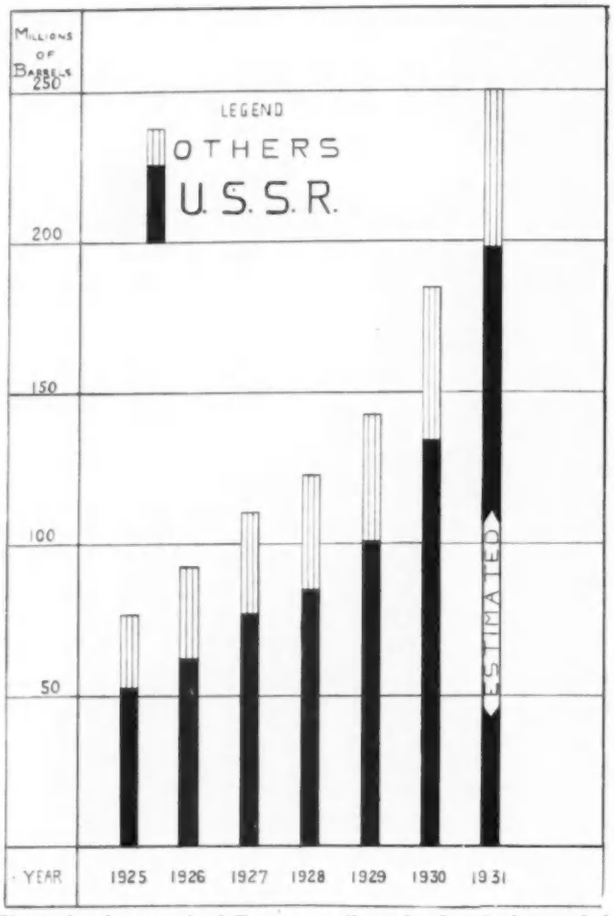


Chart showing trend of European oil production during period 1925 to 1931. Black columns refer to U. S. S. R. Upper sections refer to Western Europe and include Roumania, Poland, Germany, France, Czecho-Slovakia, and Italy

of Polish production during recent years, increases registered by Roumania, Germany, and France have been sufficient to raise the total for Western Europe by 215 per cent during the period covered by these records and estimates.

Figures included in the preliminary estimate of 1931 production reflected on the accompanying chart include 198,000,000 barrels for Russia and 45,000,000 barrels for Roumania. It is assumed that Polish production will continue to decline at its customary rate to about 4,400,000 barrels, while German production is expected to increase to approximately 2,000,000 barrels[1]. France, Czecho-Slovakia, and Italy are expected to account for about three-quarters of a million barrels; but, considering recent discoveries in the Italian province of Parma, it is possible that this figure may be exceeded.

[1]See article on German oil operations published in THE OIL WEEKLY of last week.

French Oil Interests Organize

Paris, France.—The Societe Europeenne des Petroles has been recently organized for the expressed object of assuring required supplies for the petroleum refining industry of France. It has a capital of 13,500,000 francs, and the principal shareholders are Saint-Gobain Company, la Compagnie de Berre, and individual investors.

The declared objects of the new company are research, acquisition of petroleum concessions, particularly in Colombia and Morocco, and similar activities.

Societe Pechelbronn and the Societe des Petroles, Essences et Naphtes are interested in the administration of the new company.

Canadian Deep Test Planned

Calgary, Canada.—Negotiations are in progress by which Nordon Corporation, of Canada, proposes to turn over to an American group a block of 12,000 square miles lying between Calgary and the United States border in Southern Alberta. It is understood that the American group will obligate itself to spend $200,000 on a deep test to be drilled in this area.

Left to right: K. Calvert, toolpusher; T. J. F. A. Armstrong, rigbuilding superintendent; G. W. Lindsey, assistant field superintendent; Robert Harcus, field manager; G. L. Melville, production superintendent; P. Brock, assistant production superintendent, and H. Gilmour, gas engineer, Burmah Oil Company, Chauk, Upper Burma

Completions for Past Week in U. S. Fields

▼ ▼ ▼

NEW YORK

Company, Well and Location	Initial Production Bbls.	Depth
YATES COUNTY—		
International Salt Co., Allen 1	¶3½	....
WELLSBORO FIELD—		
Belmont Quadrangle Drlg. Co., Casper	¶5½	1732
SCHUYLER COUNTY—		
J. T. Cunningham, Swarthout 1	¶5	1700
DeGolier & Co., Wyss 1	¶8	....
Frank Calkins & Co., Ernst 1	¶3	1723

WEST VIRGINIA

Company, Well and Location	Initial Production Bbls.	Depth
RITCHIE COUNTY—		
Daniel O'Day Estate, Merkey 4	2	....
U. G. Pierce & Co., Goff 1	¶½	2160
CALHOUN COUNTY—		
Hope Construction & Refg. Co., Bennett 1	¶½	....
E. N. Smith & Co., Evans 1	¶4½	2127
HARRISON COUNTY—		
Reserve Gas Co., Scott 1	¶2	2250
LEWIS COUNTY—		
Fred Flesher, Flesher 1	¶¼	4063
TYLER COUNTY—		
Manufacturers Light & Heat Co., Lemasters 3469	¶¼	3129
MARSHALL COUNTY—		
Manufacturers Light & Heat Co., Loper & Co. 3380	5	3101
DODDRIDGE COUNTY—		
Gilco Oil & Gas Co., Woofter 1	*	2644

SOUTHEASTERN OHIO

Company, Well and Location	Initial Production Bbls.	Depth
MORGAN COUNTY—		
Williams Bros., McInturf 5	*	752

CENTRAL OHIO

Company, Well and Location	Initial Production Bbls.	Depth
MEDINA COUNTY—		
Edson Sons Co., Packard 14	35	347
MUSKINGUM COUNTY—		
Hopewell Gas & Fuel Co., Van Allen 1, ¶¼	30	3184
LORAIN COUNTY—		
Ohio Fuel Gas Co., Crockett 1	¶1	....
Dillon & McFredericks, Gest 1	*	2696
ATHENS COUNTY—		
Frank O'Mara, Hocking-Athens Coal Co 11	¶¼	3173
KNOX COUNTY—		
Upham Gas Co. Magers 1	¶¼	2721

INDIANA

Company, Well and Location	Initial Production Bbls.	Depth
MONROE COUNTY—		
Ohio Oil & Petroleum Exploration Co., Young Hrs. 2	¶1	710
Ealy 1	¶¾	863
RUSH COUNTY—		
J. D. Overlesse, McManus 1	¶½	....
DAVIESS COUNTY—		
The Knox Engineering Corp., McCord 4	¶¼	430
Ben D. Ruble, Sellers 1	*	....
KNOX COUNTY—		
James H. Gardner Petroleum Co., Hall 1	*	1529
Beard 1	*	1004
SULLIVAN COUNTY—		
Wade Connelly, Gilbert 1	*	825
James E. Young, Lamb 2	*	....

KENTUCKY

Company, Well and Location	Initial Production Bbls.	Depth
CARROLL COUNTY—		
G. M. C. Oil & Gas Co., McDonald 1	¶½	315
MUHLENBERG COUNTY—		
H. & K. Producers Co., Lee 3	*	1400
H. & K. Producers Co. Lee 4	*	822

TENNESSEE

Company, Well and Location	Initial Production Bbls.	Depth
FRANKLIN COUNTY—		
J. H. McGuire, Near Winchester 1	¶¼	....
MORGAN COUNTY—		
Benedum-Trees Co., Sunbright Field 5	¶¼	1350
Eastern Tennessee Oil & Gas Co., Sunbright Field 3	¶¼	1350

MICHIGAN

Company, Well and Location	Initial Production Bbls.	Depth
MONROE COUNTY—		
Daugherty, Dayton & Co., Faskin 2	2	....
MUSKEGON COUNTY—		

For Tabulation and Comparison See Market Section

Company, Well and Location	Initial Production Bbls.	Depth
H. C. Nelson, Nelson 1	*	....
MASON COUNTY—		
M. I. Diamond, Diamond 1	*	654

KANSAS

Company, Well and Location	Initial Production Bbls.	Depth
BUTLER COUNTY—		
Garden et al, Sluss 2 "B" (owd) csl ne nw 6-27-6e	*	2776
GREENWOOD COUNTY—		
Mathews et al, Thrall 1, ne c 17-24-12e	*	1838
Gore and Phillips Pet. Co., Edwards 1, ne se ne 35-24-10e	*	2125
McPHERSON COUNTY—		
Otstot et al, Kaufman 1, nw c sw 15-21-3w	400	3035
Washoma Pet. Co. and Shell, Meeks 1, (owd) nw ne sw 7-20-1w	1850	2976
Reserve Oil Co., Ritz 1, ne c sw 31-19-1w	1820	3400
Lassen, Shell et al, Unruh 1, sw c se 31-19-1w	1670	3414
Phillips Pet. and Shell, Gratton 1, sw c se 19-19-1w	200	2958
Lario O&G, Becker 1, sw se ne 36-19-2w	2220	3396
Mroiarty et al, Sadie 2, c se sw 2-19-2w	¶21	2943
Henderson and Holden, Sommerfield 1, ne c sw 23-19-1w	*	3574

OKLAHOMA

Company, Well and Location	Initial Production Bbls.	Depth
CARTER COUNTY—		
Lesh and McCall, Carter 2, ne sw sw 14-1s-3w	100	2453
CREEK COUNTY—		
Magnolia Pet. Co., Boone 4, (owd) se sw se 34-17-7e	¶7½	2945
Evans, Lair et al, Nantz 1, ne nw sw 30-19-9e	*	2594
C. O. Buckles, Cubbie 1, sw nw se 19-17-8e	*	3672
HASKELL COUNTY—		
Finefield and Councel, Kinto 1, nw c 6-7-20e	¶1	792
Enterprise Gas Co., Green 1, c sw nw 11-9-18e	*	1273
LEFLORE COUNTY—		
Sooner O&G, Peck 1, se c sw se 22-7-26e	*	1930
LINCOLN COUNTY—		
Magnolia Pet. Co., Tillford 2, nw c sw se 7-14-4e	4185	4970
Magnolia Pet. Co., Wagner 1, nw c ne 18-14-4e	650	4958
O. H. Parkening and H. H. Watts, Grant 1, nw c ne 32-17-4e	*	4551
MARSHALL COUNTY—		
Industrial Oil Co., Sharp 1, ne se ne 17-6s-4e	*	1105
MUSKOGEE COUNTY—		
J. A. Swindler and Son, Crabtree 4, nw ne se 4-14-18e	25	1201
A. Degan, Kerr 1, sw c se 7-12-19e	*	1192
Harsha and Delaney, Barnett 1, c se se 19-16-15e	*	1898
OKFUSKEE COUNTY—		
Mid-Continent Pet. Corp., Phillips 1 (owd) ne c sw 32-12-10e	*	3838
POTTAWATOMIE COUNTY—		
Arms Drlg. Co., Duff 1, ne nw sw 10-7-4e	190	4158
Magnolia Pet. Co., Harris 1, nw c sw 6-6-4e	*	4463
STEPHENS COUNTY—		
Geo. Pace et al, Bush 1 "C" 1, ne se nw 3-2s-8w	12	1593
TULSA COUNTY—		
W. H. Bowder et al, McIntosh 1, c nw nw 4-17-14e	*	1535
Bradshaw et al, Morgan 1, sw c 7-19-14e	*	1832

CENTRAL EAST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
JOINER FIELD—		
W. D. "Andy" Anderson et al, Thrash 3	4000	3761
E. L. Chapman et al, Finney 1	500	3614
East Texas Ref. Co., Tyiska 1	15,000	3841
Frank Foster-M. G. Jeffries et al Giles 1	2500	3712
Foster-Deep Rock Oil Co., Holland 2	3600	3720
Gulf Prod. Co., Cashen 1	6000	3794
Keeling 1	5500	3805
Turner 1	8000	3748
Haynes Drilling Co., Lee 1	12,000	3646
H. L. Hunt et al, H. C. Maxwell 1	7500	3810
J. R. Thrash 1	12,000	3790
Lide-Tayloe Oil Co., C. Young 3	3000	3729
Jim Pollard et al, C. Young 1	2750	3750
Sinclair O&G Co., Mayfield Co. 2	3000	3851
Standard Pipe & Supply Co., Brett 1	4000	3749
Turman Oil Co., R. Dark 2	2000	3691
Westexas Oil & Roy. Corp., Talley 1	225	3593
KILGORE FIELD—		
British-American Oil Prod. Co., W. A. Ector 1	8000	3615
Carl Cromwell & Clayton Williams, et al, Bradbury 1	12,000	3708
East Texas Ref. Co., D. Wills 5	7500	3692
Gulf Prod. Co., F. Birdsong 2	9500	3591
F. Birdsong 4	8000	3582
Muckelroy 3	10,000	3583
A. Speer 1	14,000	3642
A. Speer 2	13,000	3546
J. Ben Watson 1	12,000	3576
Muckelroy 4	9500	3617
Houston Oil Co. et al, Dave Ladd 3	5000	3689
D. Wills 1	6500	3734
Humble O&R Co., J. A. Knowles 1	4000	3586
Nat W. Hunter Oil Prod. Co., Buntyn 4	15,000	3695
E. M. Jones-Houston Oil Co., Hindman 1	11,000	3653
Karona Oil Co., J. N. Peterson 3	7000	3630
Lewis Prod. Co.-Selby O&G Co., Pegues 1	9000	3645
S. B. Wills 2	10,000	3586
Lewis & Perkins, Brock 1	10,000	3650
Luling O&G Co., Brightwell 2	7500	3636
Mid-Kansas O&G Co., M. G. Barton 1	8500	3630
J. R. Beall 1	12,000	3657
John W. Olvey & Sample, W. R. Crim 4	8000	3737
Stanolind O&G Co., J. Powers 1	11,000	3678
M. R. Terrell 1	3000	3712
Sun Oil Co., J. R. Beall 1	9000	3625
Tidal Oil Co., Jack Bean 1	12,000	3653
Laird 1	3000	3723
Westheimer-Cox-Hamon & Daube, Peterson 4	9500	3746
LONGVIEW FIELD—		
Angeline-Burnett (Chicago Oil Corp.) McGrede 1	13,000	3628
Arkansas Fuel Oil Co., G. A. Castleberry 1	11,000	3618
Barnsdall Oil Co., McGrede 1	10,000	3656
Black-Knight Oil Co., McGrede 1	6000	3640
H. L. Blackstock et al, McGrede 1	11,000	3665
Bridwell Oil Co., D. L. Magrill 1	8000	3654
Delaney & Randall, C. C. Clemmons 1	9600	3676
E. E. Eslick & I. C. Little, Church Lot 2	9000	3606
Flanagan Prod. Co., A. J. Green 1	12,000	3596
L. S. Flannery et al, W. H. York 1	9600	3582
F. & M. Drlg. Co. (DeGlazier), Blackstock 1	15,000	3602

Company, Well and Location	Initial Production Bbls.	Depth
Humble O&R Co., T. M. Armstrong 1	10,000	3586
D. Johnston 1	15,000	3617
Magnolia Pet. Co., B. E. Rodden 6	15,000	3540
Mid-Kansas O&G Co., E. M. Nettleton 1	3000	3470
Skipper-Tippett & Hall, J. C. McKinley 1	9000	3639
Yount-Lee Oil Co., Denson 1	15,000	3657
B. E. Rodden 1-B	8000	3593
VAN FIELD—		
Humble O&R Co., Fowler 2	6000	2886

WEST TEXAS

FISHER COUNTY—		
Cranfill-Reynolds Co., Flanigan 2	65	3800
HOWARD COUNTY—		
Magnolia Pet. Co., Sarah Hyman 6	30	1700
JONES COUNTY—		
Bonds-Trout-Julian & Gulf, Williams 1	*	2581
LOVING COUNTY—		
Pete Hoffman et al, Ramsey 1	575	4245

TEXAS PANHANDLE

CARSON COUNTY—		
N. American O&G Co., Burnett (Sec. 80) 1	¶41	2437
The Texas Co., H. Schafer 1	¶16	2920
GRAY COUNTY—		
Magnolia Pet. Co., Barrett 1	20	3359
HUTCHINSON COUNTY—		
Stanolind O&G Co., Pitcher 2-A	250	3150
The Texas Co., Moore 1	75	3150
MOORE COUNTY—		
Gulf Prod. Co., Kilgore 2	¶15	3300
POTTER COUNTY—		
Canadian River Gas Co., Crawford 1-B	¶17	2540

NORTH TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
ARCHER COUNTY—		
C. W. Clark et al, Cross 1	*	1421
Cooper-Hays et al, Bearden 1	30	1087
Cullum & Alexander, Falls County 1	15	1192
Rubsam-Golding & Cochran, Hausler 1	*	1178
E. J. Stump et al, Wilson 2	25	1532
JACK COUNTY—		
The Ascot Co., Maxey 1	*	1165
Deininger & Sampley, Richards-Lanier 1	*	625
THROCKMORTON COUNTY—		
Swenson O&G Co., Swenson 1	*	5981
WICHITA COUNTY—		
Deep Oil Dev. Co., Hirschi 1	*	6002
NORTH YOUNG COUNTY—		
N. B. Dollins et al, Carpenter 1	*	914
The Texas Co., Jeffery 4-A	*	838
Williams et al, Taack 6	10	671
SOUTH YOUNG COUNTY—		
Knox et al, Brasshears 1	80	2730

CENTRAL WEST TEXAS

BROWN COUNTY—		
Atlantic-Pacific Oil Corp. et al, McClanahan 1	*	1204
Humble O&R Co., Kilgore 3-A	140	1223
E. L. Smith Oil Co.-Gulf Prod. Co., Carmichael 1	*	1620
CALLAHAN COUNTY—		
Guffey et al, Finley 4	¶¼	676
COLEMAN COUNTY—		
Arcadia Ref. Co., Burkett 1-B	280	1616
Eastland Oil Co. et al, Stewardson 1	¶2	1601

Company, Well and Location	Initial Production Bbls.	Depth
Engle et al, Stewardson 1	*	1950
Jamison-Pollard & Forster, Golson 1	210	1626
Prairie O&G Co., Webb 1	¶11½	1508
Snooks & Mitcham, Henderson 1	¶¼	730
PALO PINTO COUNTY—		
Ashe Syndicate No. 2, Seaman 1	*	4170
Bennings et al, Strawn Townsite 1	*	881
Brazos River Gas Co., Owens 1	*	1210
Haubert et al, Weldon 1	*	4160
Lone Star Gas Co., Alen-Brooks 1	*	4065
Mook-Texas Oil Co., Rexroat 1-A	*	3605
T. P. Coal & Oil Co., Stuart 1	¶9¾	2998
SHACKELFORD COUNTY—		
Hays et al, Nail 1	15	1542
STEPHENS COUNTY—		
Lone Star Gas Co., Tomlin 1	¶½	3882
A. Urban et al, Riddle 1	¶1¾-40	2040

SOUTH TEXAS

BASTROP COUNTY—		
Schimmel & Batts' Williams 1	6	1997
BEE COUNTY—		
Gulf Coast Oil Co.'s McKinney 2	¶25	3730
United Prod. Co.'s Ray 38	*	3979
GOLIAD COUNTY—		
Gibson Oil Co.'s Parks 1 (wo)	*	5267
JIM WELLS COUNTY—		
Carsil O&G Co.'s Wade 2	*	3004
KERR COUNTY—		
Col. B. M. Hatridge's Westland 1	*	461
LIVE OAK COUNTY—		
Houston Oil Co.'s Cartwright 22	*	5726
NUECES COUNTY—		
Houston Oil Co.'s Harrell 2 (dd)	¶25	2740
REFUGIO COUNTY—		
United Prod. Co.'s O'Brien 9	¶30	6462
ZAPATA COUNTY—		
E. C. Brogan's Montemayor 1	*	2000

TEXAS GULF COAST

CLEAR LAKE—		
Cullen and West, Lockwood 1	450	3089
HUMBLE—		
Sun Oil Co., O'Connor 1	*	3856
NORTH DAYTON—		
M. L. Gray, Schindler 1	*	892
ORANGE COUNTY—		
Crews Oil Co., Mansfield 1	*	1412
PIERCE JUNCTION—		
Rio Bravo Oil Co., Settegast 21-A	2500	4205

LOUISIANA GULF COAST

SULPHUR—		
Union Sulphur Co., Fee 762	1400	5080
SWEET LAKE—		
Pure Oil Co., Yount-Lee 10	1150	7387
WELSH—		
A. V. Peters, Smith 1	10	1160

NORTH LOUISIANA

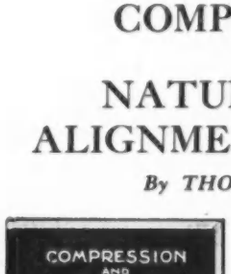
RICHLAND PARISH—		
Southern Carbon Co., Thomasson B-2, 23-16-6e	¶32¾	2442

ARKANSAS

UNION COUNTY (Smackover)—		
Root Ref. Co., Galloway 3, 4-16-15, sec. compl.)	15	2275
4, 4-16-15 (sec. compl.)	15	2295

COMPRESSION AND NATURAL GAS ALIGNMENT CHARTS

By THOMAS T. GILL



The charts in this book have been found useful in solving field problems arising in connection with the measurement, compression and transmission of natural gas, and in the manufacture of natural or casinghead gas. As many of the formulas in common use in natural gas operations are of an impirical nature, with constants that must be evaluated under varying conditions, it will be found that alignment charts are sufficiently accurate for nearly all purposes except for metering large quantities of gas, and here they serve as an excellent check on other calculations. Contains 41 charts, 65 problems. Price $3.50 Postpaid.

Send check to the

GULF PUBLISHING COMPANY

P. O. Box 1307

HOUSTON, - - TEXAS

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls—barrels; b.s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; wosr—waiting on standard rig.

Permits Granted for New Wells

▼ ▼ ▼

ARKANSAS

MILLER COUNTY—W. E. Noel et al, Dickson Hrs. 1, 1980 ft w and 660 ft s ne cor of sec. 11-20-27.

UNION COUNTY—Wilson & Chapman, J. C. Parker 1, 330 ft s and 330 ft w ne cor nw¼ se¼ 3-18-13.

OUACHITA COUNTY—R. A. McLeon, L. D. Neely 1, 150 ft s and 150 ft w ne cor se¼ sw¼ 23-15-16.

KANSAS

GREENWOOD COUNTY—Empire O&R et al, Hillman 3, sw ne ne 35-23-11e.

McPHERSON COUNTY—Noble Drlg. Co., Stanolind O&G Co. and Amerada, Zerger 2, ne c se 16-21-3w. Stanolind O&G and Amerada, Flook 4, nw c 1-20-2w. Goering Bros. and A. F. Perry, Loquement 1, sw c ne, 32-19-12. W. C. McBride, Inc., Whitewright 2, nw c sw, 30-19-1w. Twin Drlg. Co., Phillips Pet. and Shell, Gratton 2, se c 19-19-1w. Olson Drlg. Co. et al, Koehn 2, ne sw se, 36-19-2w. Lario O&G et al, Miller 1, ne c se 24-19-2w.

SEDGWICK COUNTY — Derby Oil Co., Eastborough 6, cel se nw ne 19-27-2e.

OKLAHOMA

CARTER COUNTY—K D Oil Co., Burton 1, c sw nw 30-1s-2w.

CREEK COUNTY—Wisconsin O&G, Hillis 1, sw c nw ne 6-18-8e. Abbott, Dean et al, Schuler 1, se c nw nw 1-19-8e. McCurry et al, Fulsom 1, cwl ne nw se 32-17-11e.

JEFFERSON COUNTY — C. D. Chenault, Grover 1, se c ne 15-7s-6w.

LEFLORE COUNTY—Sooner O&G, Cluman 1, c s½ ne nw 28-7-26e.

MARSHALL COUNTY—Harreld and Hudson, Williams 1, sw c se ne 24-7s-5e. McCrory and Fame, Witworth 1, sw c se 24-7s-5e.

MUSKOGEE COUNTY — Wineland et al, Jackson 1, se c ne nw 17-13-16e. G. S. Wilson, Lewis 1, cel sw nw ne 12-15-15e.

OKLAHOMA COUNTY — Slick Estate, Whitfield 2, nw c sw se se 35-12-3w. Plains-Capitol P&R, Travis 1, se c nw 15-11-3w. Wilcox and Marshall, Townlot 1, csl sw nw nw 10-11-3w. Wilcox Marshall and Butcher, Terminal 1, sw c nw 3-11-3w. Champlin, Hall and Brisco, Townlot 1, sw nw se 3-11-3w.

WAGONER COUNTY — F. D. Helshel, Apueka 2, sw c nw 6-17-15e.

LOUISIANA

BIENVILLE PARISH—Ark. La. Pipe Line Co., Shreveport, La., The Gayoso Co. inc. 1, 14-16n-10w, 560 ft n and 660 ft e of sw cor. nw¼ of sw¼.

IBERVILLE PARISH — Standard Oil Co., Shreveport, La., Schwing Lbr & Shngle. Co. 7, 74-9s-10e, 675 ft n and 1275 ft w of center of section.

SABINE PARISH — Zeke Lehman, Many, La., McCormick 1, 2-7n-11w, 660 ft e and 330 ft n of sw cor ne¼ and sw¼. Louis K. McGuffin, Shreveport, La., Bush 1, 1-7n-11w, 531 ft n and 210 ft e of sw cor nw¼ of se¼. W. H. Perritt, Shreveport, La., Bowman Hicks 4, 2-12n-7w, 268 ft n and 398 ft w of se cor se¼ of ne¼. Geo. D. Pipes, Monroe, La., C. S. Byrd 1, 1-7n-11w, 740 ft e and 250 ft s of nw cor sw¼ of nw¼. Sabine Ry. Co., Inc., Shreveport, La., Skinner 1, 5-8n-11w, 150 ft n and 520 ft e of sw cor ne¼ of sw¼. A. F. Tarver, Shreveport, La., Cutner 1, 12-7n-11w, 330 ft s and 330 ft e of nw cor of sec.

WEST FELICIANA PARISH—Como Oil & Dev. Co., New Orleans, La., M. B. Wood 2, 54-1s-4w, 1500 ft n and 1500 ft se from sw cor of section.

TEXAS

ARCHER COUNTY—Dr. C. W. Wallace, Wichita Falls, Fee, 167, 15, S 1, S. P. Ry. sur, 450 ft from n and e lines.

BASTROP COUNTY—Schimmel & Batts, San Antonio, J. E. Ferguson, 100, 1, J. Doyle sur, 160 ft from nw and 1600 ft from ne line.

BEE COUNTY—J. M. Davis et al, San Antonio, G. Ray, 38, 1, J. H. Williamson sur, 330 ft from n and e lines.

For Tabulation and Comparison See Market Section

BEXAR COUNTY—Penn Oil Co., Dallas, R. Pollock, 200, 1, J. W. Riall sur, 250 ft from n and 2300 ft from e line.

BOWIE COUNTY—Tom Bell, Vivian, La., R. Merritt, 70, 1, Y. S. McKinney sur, 220 ft from w and 1754 ft from s line.

CALLAHAN COUNTY—I. G. Parsons, Moran, T. E. Hayden, 80, 1, S 115, Univ. Lands sur, 300 ft from s and e lines.

CASS COUNTY—Everts Drilling Co., Wichita Falls, H. H. Bullington, 86, 1, H. E. Callahan sur, 400 ft from n and 200 ft from w line.

CHAMBERS COUNTY—Humphreys Corp., Houston, Fitzgerald-Meadows, 14, 1, H. Griffith sur, 50 ft from n and 100 ft from w line.

DUVAL COUNTY—S. J. Carpenter, San Antonio, J. Benavides, 39, 1, S 1, B 38, Mesquite sur, 300 ft from nw and 150 ft from sw line.

GREGG COUNTY — Kingwood Oil Co., Okmulgee, A. Godfrey, 10, 1, M. Van Winkle sur, 162 ft from n and 150 ft from w line. Houston Oil Co., Houston, W. A. Bouknight, 70, 1, H. H. Edwards sur, 330 ft from s and e lines. Tidal Oil Co., Fort Worth, N. Bean, 58, 3, I. Ruddle sur, 330 ft from n and 250 ft from e line; 4, 250 ft from s and 330 ft from e line. Columbia O&G Co., Dallas, T. Snoddy, 13, 1, W. H. Castleberry sur, 342 ft from w and 424 ft from s line. H. M. Harley, 10, 1, W. M. Robinson sur, 150 ft from n and e lines. Simms Oil Co., Dallas, A. Christian, 23, 1, G. W. Hooper sur, 165 ft from e and 330 ft from s line. Gene Campbell, Longview, E. E. Anderson, 13, 1, G. W. Hooper sur, 160 ft from s and e lines. A. G. Oliphant, Longview, B. Peterson, 80, 2, J. S. Caruthers sur, 1340 ft from w and 480 ft from s line. Stanolind O&G Co., Longview, Snoddy, 13, 1, W. M. Castleberry sur, 342 ft from n and 374 ft from e line; M. Magrill, 20, 1, D. Sanchez sur. 364 ft from n and 330 ft from e line; J. J. Flewellyn, 100, 1, M. Mann sur, 350 ft from n and 950 ft from e line; J. S. Powers, 100, 1, J. Womack sur, 330 ft from n and e lines. Sinclair O&G Co., Fort Worth, M. Moncrief, 252, 2, W. H. Castleberry sur, 1242 ft from n and 135 ft from w line. W. H. Roeser, Inc., Fort Worth, W. T. Hall, 1½, 1, D. Sanchez sur, center. Doss & Jones, Oklahoma City, E. Hagler, 30, 1, J. S. Caruthers sur, 200 ft from n and w lines. Andrew Southworth, Dallas, J. C. Bumpas, 2, 1, W. H. Castleberry sur, 130 ft from w and 150 ft from s line. Mid-Kansas O&G. Co., Shreveport, J. E. Choice, 64, 1, W. P. Chisum sur, 165 ft from n and e lines. Mullendore, Berry & Berry, Longview, W. W. Elder, 20, 1, M. Van Winkle sur, 200 ft from e and 340 ft from s line. Pace Pet. Corp., Oklahoma City, T. Elder, 3½, 1, M. Van Winkle sur, 71 ft from e and 125 ft from s line. P. M. Armstrong, Longview, E. L. Walker, 2, 1, Gladewater Twste., center of blk 64. Kilgore Central Oil Co., Tyler, H. C. Russell, 2, 1, M. Van Winkle sur, center. Stanolind O&G Co., Longview, J. C. Persons, 146½, 1, W. Castleberry sur, 330 ft from s and e lines; Harley, 10, 1, Wm. Robinson sur, 156 ft from nw and 200 ft from ne line (Corrected location). Cranfill & Reynolds, Dallas, F. T. Rembert, 83, 1, J. Ruddle sur, 300 ft from n and 250 ft from e line. Roeser & Pendleton, Inc., Fort Worth, J. E. Sheffield, 50, 1, D. Sanchez sur, 287 ft from w and 278 ft from s line. Magnolia Pet. Co., Dallas, J. King, 33, 1, W. P. Chisum sur, 150 ft from n and e lines; W. B. Goyne, 31, 2, J. T. McDaniel sur, 150 ft from s and e lines; G. Davis, 25, 2, W. P. Chisum sur, 187 ft from n and w lines. A. H. Tarver, Shreveport, M. Magrill, 5¾, 1, D. Sanchez sur, 158 ft from w and 282 ft from s line. G. & R. Oil Co., Longview, T. B. Blackman, 20, 1, W. P. Chisum sur, 180 ft from n and 640 ft from e line. Magnolia Pet. Co., Dallas, J. B. Packman, 20, 1, D. P. Chisum sur, 330 ft from e and 240 ft from s line. Arkansas Fuel Oil Co., Shreveport, V. Calvin, 61, 1, H. Hathaway sur, 300 ft from s and w lines. Smitherman & Greer, Longview, G. Jones, 40, 1, G. W. Hooper sur, 330 ft from s and w lines. T. H. McKinnie, Kilgore, McNeely, 5, 1, W. P. Chisum sur, 150 ft from s and e lines. Edwin Falvey, Longview, T. M. Collins, 26, 1, G. W. Hooper sur, 150 ft from s and e lines. O'Brien Bros., Shreveport, W. E. McHaney, 39, 1, H. Hathaway sur, 275 ft from e and 250 ft from s line. Texas Co., Shreveport, M. T. Cole, 192, 1, E. L. Walker sur, 660 ft from s and 333 ft from w line. Empire G&F Co., Wichita Falls, E. Muckleroy, 17, 1, W. P. Chisum sur. F. F. Roberts, Longview, W. B. Goyne, 14, 1, M. Van Winkle sur, 200 ft from w and 267 ft from n line. Magnolia Pet. Co., Dallas, C. Jones, 65, 1, G. W. Hooper sur, 165 ft from e and 150 ft from s line. B. E. Jones, Longview, D. Beall, 13, 1, M. Van Winkle sur, 200 ft from n and e lines. Humble O&R Co., Houston, J. A. Knowles, 100, 2, M. Van Winkle sur, 235 ft from s and 245 ft from e line. Vacuum Oil Co., Houston, G. W. Tate, 66½, 1, J. Ruddle sur, 250 ft from n and 232 ft from w line. A. G. Oliphant, Longview, A. Godfrey, 26½, 1, M. Van Winkle sur, 245 ft from n and 320 ft from w line. Yount-Lee Oil Co., Beaumont, F. K. Lathrop, C1, Wm. Robinson sur, 6578 ft from w and 3920 ft from n li of survey. Arkansas Fuel Oil Co., Shreveport, M. D. Allison, 62, 1, Wm. Robinson sur, 300 ft from n and 250 ft from w line. Sigler, Lesh & McCall, Nocona, M. Young, 50, 1, C. Rhodes sur, 330 ft from n and w lines. F. H. E. Oil Co., Fort Worth, B. C. Christian, 87, 1, G. W. Hooper sur, 330 ft from n and w lines.

HARDIN COUNTY — E. W. Skinner Oil Co., Saratoga, Kirby, 2, 16, BBB&C sur, se corner.

HARRISON COUNTY — Terwilleger & Parkening, Tulsa, T. J. Taylor, 3900, 1, B 33, W. H. Payne sur, 1858 Vs from n and 2398 Vs from w li.

JONES COUNTY—B. A. Duffey Abilene, B. King, 80, 2, B 19, M. Bueno sur, 200 ft from s and e lines.

JIM HOGG COUNTY—D. C. Dewitt, San Antonio, T. Gomez, 160, 1, Sec. 12 sur, 1170 ft from ne and 150 ft from nw line.

KENDALL COUNTY—F. S. Dibble, Lockhart, E. Ellebracht, 320, 1, No. 77 TW&NG sur, 866 ft from s and 438 ft from e li sur.

KLEBERG COUNTY—Barbee & Hunter, Oklahoma City, J. D. Finnegan, 250, 1, El Pasadizo sur, 150 ft from n and w lines.

LIBERTY COUNTY—Gulf Prod. Co., Houston, E .W. Boyt, 621, 14, No. 22 H&TC sur, 500 ft w of No. 13.

McLENNAN COUNTY—T. F. Oliver, Waco, T. F. Bryan, 477, 1, S 2, Rge. 7, T. Vega sur, 200 ft from n and 330 ft from e line.

MEDINA COUNTY—F. E. Tegler, San Antonio, J. P. Nixon, 279, 6A, No. 14, Blk 2, 600 ft from w and 584 ft from n line.

NACOGDOCHES COUNTY—L. O. Baker, Fort Worth, C. M. Langford, 639, 1, S. Caison sur, 350 Vs from n and 370 Vs from w li Blk 5.

NUECES COUNTY—L. L. Smith, Inc., San Antonio, H. B. Hunter, 75, 1, H. B. Shepherd sur, 150 ft from s and w lines. Houston Oil Co., Houston, S. Page, 75, 1, S 8, Rge. V, H. L. Kinney sur, 200 ft from n and 300 ft from e line.

PANOLA COUNTY — Arkansas Louisiana Pipe Line Co., Shreveport, L. Werner, 74, 14, B. C. Jordan sur, 341 ft from n and 300 ft from e line.

RUSK COUNTY—S. V. Guerin, Tyler, W. P. Keeling, 5½, 1, Cordova sur, 150 ft from s and e lines. Martin & Sladek Pet. Co., Tyler, R. F. Russell, 17½, 1, T. J. Martin sur, 425 ft from w and 250 ft from s line. H. L. Hunt, Henderson, R. F. Russell, 35, 1, T. J. Martin sur, 250 ft from n and 427 ft from w line; R. W. Fair, 131, 2, McAnulty-Vargas sur, 285 ft from e and 150 ft from n line; C. Young, 1, 26, 4, M. J. Pru sur, 810 ft from e and 210 ft

from s line. A. P. Finney, 32, 2, R. H. Penney sur, 210 ft from w and 200 ft from s line. S. S. Plowman, 40, ½, 2, F. Cordova sur, 250 ft from s and 330 ft from e line. R. Pool, 20, 1, F. Cordova sur, 340 ft from n and w lines. Earl Calloway et al, Tyler, L. Harman, 33½, 8, Cordova sur, 150 ft from n and e lines; 1, 297 ft from n and 150 ft from w line; 5, 150 ft from s and e lines; 4, 150 ft e of center of w line. Texas Unity Oil Co., Houston, I-GN, 2, 23, E. G. Sevier center; 2, 24, center; 2, 22, center; 2, 20, center; 2, 21, center; 2, 19, center; 2, 17, center; 2, 18, center; 2, 25, center; 2, 26, center; 2, 27, center; 2, 28, center; 2, 29, center; 2, 30, center; 2, 31, center, 2, 32, center; 2, 33, center. Stanolind O&G Co., Longview, B. Laird, 40, 5, I. Ruddle sur, 330 ft from s and w lines. K. Morse, 12½, 1, R. Smith sur, 150 ft from n and 251 ft from e line. M. O'Quinn, 98, 1, G. Berry sur, 403 ft from s and e lines. M. B. King, 50, 1, McCabe, M. sur, 330 ft from n and w lines. B. Laird, 40, 4, I. Ruddle sur, 512 ft se of No. 1; 3, 588 ft se of No. 2. Patterson Drilling Co., Henderson, M. Brock, 9, 1, R. W. Smith sur, 150 ft from s and w lines. Jones Reserve Pet. Co. & Houston Oil Co., San Antonio, B. F. Hindman, 21, 2, R. W. Smith sur, 150 ft from s and w lines. S. V. Guerin, Tyler, G. W. Eaton, 1½, 1, Cordova sur, 120 ft from e and 130 ft from s line. H. Read, Henderson, M. L. Thompson, 10, 1, F. Cordova sur, 150 ft from n and w lines; 2, 150 ft from n and e lines. East Texas Refg. Co., Dallas, A. Givens, 33, 1, Smith sur, 450 ft from n and w lines. P. R. Bonds, Tyler, R. A. Motley, 39, 1, J. McDaniel sur, 250 ft from e and 150 ft from s line. Paul Vitek, Fort Worth, G. W. Eaton, 84½, 3A, F. Cordova sur, 660 ft w of No. 1; 2A, 660 ft s of No. 1; 1A, 165 ft from n and e lines. G. W. Eaton, 100, 5, F. Cordova sur, 450 ft from n and 150 ft from w line. Carroll & Taylor, Tyler, J. P. Gipson, 6½, 1, T. C. Lloyd sur, 156 ft from e and 150 ft from s line. F. L. Coogan, Tyler, Florence, 16, 1, F. Cordova sur, 419 ft from s and e lines. F. H. E. Oil Co., Fort Worth, M. L. Thompson, 6, 1, F. Cordova sur, 170 ft from n and 230 ft from e line. E. L. Martin, Sayre, Okla., J. Cansler, 40, 1, E. Collard sur, 301 ft from e and 200 ft from s line. W. E. Stewart, Arp, C. C. Giles, 9, 1, M. J. Pru sur, 150 ft from n and e lines. Turman Oil Co., Tulsa, W. E. Brightwell, A, 32½, 2, E. G. Sevier sur, 443 ft w of No. 1. A. J. Deason, 50, 6, M. J. Pru sur, 150 ft from n and e lines. W. P. Brightwell, B, 30, 4, R. E. Winn sur, 150 ft from s and w lines. C. Young, 20, 3, M. J. Pru sur, 150 ft from n and w lines. R. Dark, 48, 2, M. J. Pru sur, 150 ft from n and w lines; 1, 150 ft from n and e lines. Empire G&F Co., Wichita Falls, H. P. Leverett, 85, 2, J. C. Snow sur, 175 ft from n and 324 ft from e line. British American Oil Prod. Co., Tulsa, Kangera, 70, 1, M. J. Pru sur, 150 ft from n and w lines; 2, 150 ft from n and 236 ft from e line. Humble O&R Co., Houston, M. Kangera, 19½, 9, M. J. Pru sur, 200 ft from n and 236 ft from e line. S. S. Lairdd, 230, A8, I. Ruddle sur, 350 ft from nw and 300 ft from w line. W. P. Moore, 50, 1, J. Ellington sur, 401 ft from n and 342 ft from w line. J. N. Peterson, 45, 10, I. Ruddle sur, 200 ft from n and w lines. B. Laird, 63, B3, I. Ruddle sur, 330 ft from e and 250 ft from s line. J. N. Peterson, 63, 9, I. Ruddle sur, 200 ft from s and w lines. M. Kangera, 116, 8, M. J. Pru sur, 522 ft from n and 157 ft from w line. A. Blackwell, 80, 1, M. J. Pru sur, 231 ft from s and 320 ft from e line. J. E. Wheelis, 168, 1, F. Cordova sur, 2323 ft from n and 333 ft from w line. S. A. Plowman, 228, 1, F. Cordova sur, 150 ft from n and 159 ft from e line. L. D. Crim, 94, 23, I. Ruddle sur, 250 ft from nw and 330 ft from ne line. J. H. Silvey, 65, 1, Geo. Berry sur, 551 ft from w and 407 ft from s line. A. L. Walker, 124, 1, F. Cordova sur, 258 ft from n and 283 ft from e line. J. H. Wooley, 200, 1, F. Cordova sur, 150 ft from n and 283 ft from w line. Kirby Pet. Co., Houston, S. Stone, 32, 1, M. J. Pru sur, 786 ft from w and 250 ft from s line. Southern Crude Oil Pur. Co., Fort Worth, W. H. Smith, 97, 1, Wm. Killen sur, 50 ft from e and 300 ft from s line. Petroleum Marketing Corp., Houston, W. P. Keeling, 8, 1, F. Cordova sur, 263 ft from n and 326 ft from e line. O'Neill, Moninger & Wilson, Wichita Falls, M. L. Thompson, 5, 1, F. Cordova sur, 150 ft from n and e lines. Tidal Oil Co., Fort Worth, Hale, 24, 1, J. Darley sur, 150 ft from s and w lines. J. B. Irion, 74, 2, M. J. Pru sur, 650 from n and 150 ft from e line. Haynes Drilling Co., Shreveport, M. Lee, 74, 1, M. J. Pru, sur, 200 ft e of center of w line; 2, 200 ft from s and e lines. B. Cash, 21, 1, F. Cordova sur, 200 ft from s and e lines. Magnolia Pet. Co., Dallas, G. W. Eaton, 40, 1, F. Cordova sur, 150 ft from s and w lines. W. P. Moore, 152, 3, J. Ellington sur, 375 ft e of center of w line. Blackwell O&G Co., & Jones Bros., Cushing, Okla., W. P. Moore, 27, 3, M. J. Pru sur, 300 ft from n and 250 ft from w line. Gulf Prod. Co., Houston, O. H. Grissom, 57, 2, F. Cordova sur, 330 ft from s and 150 ft from e line; 3, 330 ft from s and w lines. O. H. Grissom, 21, 1, F. Cordova sur, 330 ft from n and e lines. Golding & Murchison Oil Co., Wichita Falls, J. E. Thrash, 20, 1, Cordova sur, 373 ft from n and 289 ft from e line. C. Young, 63, 2, M. J. Pru sur, 250 ft from n and w lines. East Texas Refg. Co., Dallas, O. H. Grissom, 84, 1, F. Cordova sur, 330 ft from n and e lines. Devonian Oil Co. & Gulf Prod. Co., Houston, R. A. Motley, 423, 3, Wm. Killen sur, 375 ft from e and 425 ft from s line. Beard & Hammond Oil Co., Tyler, W. P. Keeling, 22, 1, F. Cordova sur, 150 ft from s and w lines. Westheimer & Daube, Ardmore, D. Peterson, 40, 4, I. Ruddle sur, 625 ft from n and 340 ft from e line. Roeser & Pendleton Inc., Fort Worth, R. Pool, 65, 2, F. Cordova sur, 200 ft from n and w lines. Westexas Oil & Royalties Co., Fort Worth, J. D. Stone, 9, 1, M. J. Pru sur, 113 ft from n and 150 ft from e line; 2, 150 ft from w and 113 ft from s line. Lewis Prod. Co., Wichita Falls, C. B. Pegues, 40, 1, G. Cooper sur, 150 ft from n and w lines.

RED RIVER COUNTY—Concord Oil Co., Dallas, Norris-Guest, 35, 2, S 88, T&P sur, 150 ft from e and 210 ft from s line.

SMITH COUNTY—Deason Oil Co., Tyler, T. O. Wright, 9, 1, J. Vargas sur, 150 ft from n and w lines. Concord Oil Co., Dallas, W. R. Wolford, 2, 1, Jas. Jordan sur, 148 ft from n and w lines. Magnolia Pet. Co., Dallas, J. R. Wright, 166, 2, J. Vargas sur, 500 ft sw of No. 1. R. Loosier, 137, 1, J. Vargas sur, 200 ft from w and 250 ft from s line. Arkansas Drlg. Co., Longview, L. A. Wallace, 204, 1, Wm. Avery sur, 160 ft from n and e lines.

SCURRY COUNTY — Brock & Simons' Brownwood, F. Kruse, 160, 1, S, 118, H&TC sur, 330 ft from n and w lines of se¼.

SHACKLEFORD COUNTY—J. S. Hart, Albany, R. Dyess, 1, S, 1, Blind Asy. sur, 150 ft from n and 110 ft from w line, blk. 42. Loggie & Arendt Oil Co., Albany, Compton, 160, 1, S, 826, TE&L sur, 1100 ft from ne and 150 ft from se line sec. Prod. Purchasing Co., Moran, E. Flippen, 160, 1, S 35, B 11, T&P sur, 150 ft from n and 160 ft from w line. Geo. Callihan, Albany, Fee, 1, 1, Jacobs Add. sur, 20 ft from n and e lines of blk. 44.

TITUS COUNTY—Joiner Pet. Co., Dallas, C. D. Browne, 181, 1, V. Evans sur, 400 ft from e and 1320 ft from s line.

TYLER COUNTY—L. H. Wentz, San Antonio, J. P. Mann, 815, 1, Wm. Campbell sur, 330 ft from s and w lines.

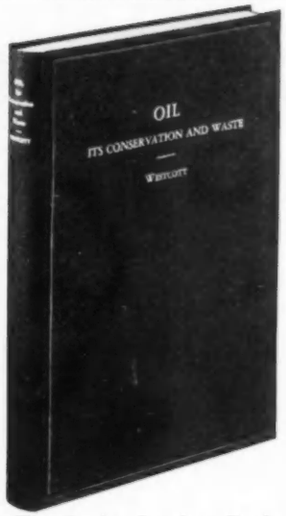
UPSHUR COUNTY — Weaver & Young Bros. & Alexander, Tyler, L. J. Everett, 170, 1, Wm. Goodwin sur, 330 ft from s and e lines. Sorrells & Duffy, Longview, J. W. Woodin, 160, 1, I. Williams sur, 218 ft from s and 200 ft from e line survey. Arcadia Refg. Co. & Harper, Tyler, P. S. Johnson, 116, 1, J. H. Mallory sur, 1000 ft from n and e lines. W. W. H. Peckham, Wichita Falls, J. W. Free, 28, 1, G. W. Hooper sur, 330 ft from n and w lines.

VAN ZANDT COUNTY—Pure Oil Co., Ft. Worth, R. L. Wells, 51, 5, M. Gross sur, 100 ft w of No. 3. L. A. Smith, 40, 3, J. Walling sur, 250 ft from e and 622 ft from s line. E. York, 109, 7, J. Walling sur, 200 ft from w and 370 ft from s line. Joiner Pet. Co., Dallas, T. B. Meek, 328, 1, A. Dutcher sur, 300 ft from ne and 350 ft from nw line.

WHARTON COUNTY—Rose Tex Oil Co., Rosenberg, M. S. Floyd, 32, 2, S. F. Austin sur, 100 ft nw of No. 1.

WEBB COUNTY—Eugene Garner, Jr., Hebbronville, A. S. Billings, 640, 1, S 71 sur, 956 ft from n and 411 ft from e line nw¼ of ne¼.

ZAPATA COUNTY—Lowe & Rogers, San Antonio, P. Beanvides, 40, 2, S 613 sur, 340 ft from nw and 170 ft from sw line blk 13. O. & A. Oil Co., Laredo, Garcia, 200, 3, No. 3, Fansler sur, 600 ft from ne and 150 ft from se line. E. C. Brogan, Hebbronville, G. T. Montemayor, 40, 1, S 64, B 11, 150 ft from n and w lines. Allied Gas Co. & Allen & Morris, Laredo, E. Gutierrez, 432, 15, No. 4, Comitas sur, 2326 ft from ne and 200 ft from se line. O. W. Killam, Laredo, A. Bustamente, 40, 8, No. 5, Comitas sur, 622 ft from sw and 715 ft from se line blk 7.



Oil, Its Conservation and Waste

By JAMES H. WESTCOTT

FOURTH EDITION, OCT., 1930

This new edition contains much new material. The tables have been brought down to date and 53 new ones added.

This book is of particular value to those who desire a broad general knowledge of the oil industry and its progress. It should be an incentive to the workers in the industry for the solution of the problems confronting it.

The Statist, London, England: "In the fourth edition of this useful work, Mr. Westcott expresses belief that a new era of reasonable prosperity for oil producers is in the making."

Economic Geology, Yale University, New Haven, Conn.: "An up-to-date revision of a well known book. Pictures the technical problems of production and refining and their bearing on waste and conservation. Valuable, both for technical oil men and those interested in oil as a business. The conservationist should study it."

273 PAGES — $3.00 POSTPAID

Send checks to

THE GULF PUBLISHING COMPANY

P. O. BOX 1307 HOUSTON, TEXAS

Wildcat Reports From All Sections

▼ ▼ ▼

CENTRAL EAST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
CHEROKEE COUNTY—		
Sinclair O&G Co., Martin 1	*	3999
RAINS COUNTY—		
Rains County Oil Corp., Cates 1 ..	*	4210
RED RIVER COUNTY—		
Droppleman & Bundy, Cunningham 1	*	2756
VAN ZANDT COUNTY—		
J. C. Fore et al, P. S. Hand 1...	*	5160
Wilson et al, Stribling 1	*	2031

ANDERSON COUNTY—H. B. McConnell et al's Walston 1, M. Main sur, dk. Rianjo Pet. Co.'s Lynn 1, sp and sd.

BOWIE COUNTY—Mayfield Oil Royalties & Devore's R. B. Cooper 1, W. M. Ward sur, elev 36, dr 1960 ft. W. A. Swift-G. W. Hindman & Tom Ball's Roy Merritt 1, Y. S. McKinney sur, sd after testing dry 2325 ft. Lee J. Timberlake et al's J. M. Tidwell 2, L. M. Rice sur, elev 290 ft, sd 3000 ft.

CAMP COUNTY—W. E. Duke et al's L. B. McCasslin 1, Mary Hays sur, lcn.

CASS COUNTY—R. G .Baker et al's W. R. Kaver 1, John Lick sur, dr 1460 ft. Everetts Drlg. Co.'s H. W. Wittington 1, L. Strong sur, lcn. Geo. B. McCamey et al's R. E. Hall 1, H. Buckler sur, top Pecan chalk 2387 ft, sd 2560 ft. C. E. Murdock et al's G. W. Coody-1st Nat'l Bank 1, Evans Watson sur, elev 401 ft, Pecan chalk 2522-2953 ft, top Austin chalk 3490 ft, tested dry and sd 3860-3990 ft. Nelson et al's Irvin 1, M. Harris sur, lcn. Olds-Smith et al's Joe Anthony 1, J. C. Byers sur, dr 2265 ft. Pigg & Favis (Fraley & Nicholson's) Ray Bryan (88-ac) 1, A. H. Latimer sur, sd 1970 ft. John C. Rogers et al's Henderson 1, elev 354 ft, sd 955 ft; Lanier 1, K. A. Welborn sur, elev 366 ft, co 2275 ft.

CHEROKEE COUNTY—Ben Banner et al's A. S. Lacy 1, J. L. Hogg sur, sd 2955 ft. D. H. Byrd et al's Fariss 1, elev 215 ft, dr 4105 ft. Helen Claire Oil Co.'s M. B. Perkins 1, Thos. Sanford sur, rig. H. M. Jones et al's McLee 1, Jas. Knight sur, Pecan chalk 3138-3450 ft, dr 3490 ft. O. W. Killam et al's W. A. Newton 1, Thos. Quevedo sur, Pecan chalk 3519-3902 ft, dr shale 4210 ft. Rowan-Nichols Oil Co.-Tidal Oil Co.'s W. T. Norman 1, Irby Large sur, rig. Shell Pet. Corp.'s Southern Pine 1, G. McGregor sur, lcn. W. A. Stone et al's E. M. Decker 1, Geo. Ruddle League, top Pecan chalk 4342 ft, sd 4615 ft. Walton Oil Co.'s E. Singleton 1, Tillman Waters sur, sd 2960 ft.

DELTA COUNTY — The Delta Co.'s M. Neatherly 2, J. B. Arnold sur, sd 3145 ft. D. S. Hoad et al's J. J. Baker 1, B. Carson sur, elev 437 ft, sd 1555 ft.

FRANKLIN COUNTY — Harper-Byers Oil Co.'s A. J. Laws 1, D. G. Rogers sur, dr 3055 ft. L. B. Pruitt & Geo. L. Pace's C. E. Cowan 1, Sam Lipscomb sur, rig.

FREESTONE COUNTY—Haley & Clark's M. C. Lancaster 1, D. Avant sur, dk. E. L. Smith Oil Co.'s E. Jackson 1, Wiley Carter sur, dr 1115 ft.

HENDERSON COUNTY—Arcadia Ref. Co. & Shell Pet. Corp.'s Dean 1, Simon Boon sur, Pecan chalk 2432-2650 ft, dr shale 2710 ft. Westhyde Investment Co.'s Thornhill 1, Jas. Spivey sur, lcn.

LAMAR COUNTY—Everett & Allen's J. A. Guest 1, Luke Roberts sur, elev 525 ft, top Pecan chalk 2072 ft, trace oil and gas, set cas 2700 ft. Puritan Oil Co.'s Geo. Parr 1, R. Russell sur, rig.

LEON COUNTY—Sun Oil Co.'s E. Grayson 2, Marquette Blk., rig.

MORRIS COUNTY — Verne Dumas Pet. Co.'s Thos. Ball 1, A. S. Young sur, rig.

NACOGDOCHES COUNTY — Adams & Williams' Stephens 1, Sanchez sur, ru. Big Indian Oil Co.'s Stewart 1, Black Jack community, lcn. Texokla Corp.'s Driver 1, Torres sur, dr 1800 ft. Darwin Benedum's Conkrite 1, Chireno sur, dr 3840 ft. West Texas Oil & Royalties Corp.'s King 1, west of Garrison, dr 2800 ft. C. M. Bowie's Miller 1, Strode sur, set cas 675 ft. Bunte, Martin & Scroggins' Boatman 1, dr 2000 ft. J. F. Burke et al's Pattison 1, Coy sur, sd 4270 ft lime. Churchill Armstrong's Hart 1, Alazan block, lcn. Fain & McGaha's Pirtle 1, Edward sur, dk. Foreman & Weller's Stanley 1, ru. Matthew Foreman's Mattaeur 1, Chireno sur, dk. Upland Oil Co.'s Cooper 1, Lilbert, dr 1300 ft. R. E. Burt's Reese 1, ½ mi s Nacogdoches, lcn. Twin Counties Oil Co.-Joiner's Reeves 1, Lloyd sur, ru. Ramey-Stegall's Cates 1, Melrose, lcn. Sequoia Oil Co.'s Boyd 1, Oliver sur, ru. W. Wheeler's Parmley 1, dr 3500 ft shale. E. L. Chapman's-Tilford Hunt 1, Bennett sur, dr 3600 ft. Joiner & Henson's Legg 1, Durst sur, dr 2840 ft, reported o.s. blossom sand. Paul Vitek's Hayter 1, Santos Coy sur, dr 1500 ft.

RAINS COUNTY—Berry-Hale et al's Owenby 1, J. Alexander sur, dr 2015 ft. Rains Co. Oil Corp.'s Cates 1, elev 426 ft, top Pecan chalk 2232 ft, base Austin chalk 3683 ft, dry and abn in shale 4210 ft.

RED RIVER COUNTY—C. M. Joiner-M. Harris-Echols & Peters' E. Howison 1, W. Humphries sur, elev 540 ft, sd 1960 ft. Everett & Allen (S. A. Ross et al's) W. F. Bryan 1, P. Vaughn sur, dk. Pierson et al (Concord Oil Co.'s) J. R. Dillahunty 1, I. Moore sur, sd 430 ft. Johnson Pet. Co.'s S. C. Style 1, E. M. Dean sur, sd 2410 ft.

RUSK COUNTY—Adams & Williams' Stephens 1, M. Sanches sur, dk. A. J. Brown et al's Strong 1, John Hallam sur, dk. R. W. Giles-Frank Melat et al's Newt Orr 1, Wm. Tippett sur, dr 2105 ft. F. Griffith et al's F. J. Lowe 1, Wm. Williams sur, elev 366 ft, top Pecan chalk 2790 or 2820 to 3140 ft, top Austin chalk 3530 ft, fsh 3707 ft. A. W. Jones Oil Co.'s J. Menefee 1, T. G. Walling sur, dk. J. S. Kimbrough et al's Weatherly 1, Robt. Martin sur, Pecan chalk 2784-3240 ft, fsh 3310 ft. Leonard Pet. Co.'s Sanger-Tablowski 1, J. P. Meredith sur, dr 1225 ft. Pitts et al's Freeman 1, Jessie Watkins sur, dk. Nat Sadler et al's Ed. Sparks 1, Abner Nail sur, sd 1257 ft. Sinclair O&G Co.'s March 1, L. Williams sur, co 1900 ft. R. C. Viehl et al's Burton 1, J. J. Ybarbo sur, dk. Westexas Oil & Roy. Corp.'s E. C. King 1, J. C. Morrison sur, top Pecan chalk 2650 ft, dr 2710 ft.

SMITH COUNTY—Arkansas Drlg. Co.'s L. A. Wallace 1, W. W. Avery sur, set cas 143 ft. Big Indian Oil Co.'s Mills-Wolford 1, dr 2080 ft; Holland 1, elev 509 ft, Pecan chalk 2775-3293 ft, Austin chalk 3720-3780 ft, dr chalky shale 3955 ft. J. A. Brown et al's T. V. Wright 1, dk. Bunte et al's J. Adkisson 1, dk. Central O&G Co.'s T. O. Wright 1, dk. E. L. Chapman et al's Alexander 1, J. K. Carson sur, Pecan chalk 2700-2730 ft, dr 4000 ft. Concord Oil Co.'s Wolford 1, dr 1215 ft. Cotton Belt Oil Co.'s Moore-Jackson 1, dk. Verne Dumas Pet. Co.'s Cook 1, rig. Bailey Gaunce et al's Cook 1, Jas. Jordan sur, sd 2550 ft. W. B. Hamilton et al's Gambrell 1, Pecan chalk 2640-3070 ft, Austin chalk 3493-3592 ft, set cas 3640 ft. Imperator Oil Corp.'s I. M. Green 1, T. Hogan sur, sd 1750 ft. C. M. Joiner et al's W. M. Wright 1, E. Van Sickle sur, top Pecan chalk 3756 ft, dr chalky shale 3815 ft. Magnolia Pet. Co.'s Roy Loosier 1, dr 2400 ft; J. R. Wright 1, Pecan chalk 2670-3091 ft, Austin chalk 3535-3696 ft, cem cas 3696 ft; Wright 2, rig. Macmillan Pet. Corp.'s Wright 1, lcn. C. R. Morrison et al's I. Roy 1, H. C. Cook sur, top Pecan chalk 2880 ft, sd 3325 ft. Owen-Sloan Oil Co.'s M. Starnes 1, Sam Epps sur, elev 357 ft, Pecan chalk 2620-2973 ft, Austin chalk 3687-3715 ft, coring shale 3760 ft. M. M. Rowan et al's Gibbons 1, J. M. Garcia sur, dr 1540 ft. Sinclair O&G Co.'s Jarvis 1-B, Pecan chalk 2670-3050 ft, Austin chalk 3480-3630 ft, cem cas on o. s. 3638-48 ft; Mayfield 1, dk; G. Patterson 1, Pecan chalk 2705-3050 ft, dr 3660 ft; R. G. Wright 1, dr 2615 ft. Sun Oil Co.'s A. V. Ritch 1, Pecan chalk 2708-3058 ft, top Austin chalk 3512 ft, dr 3580 ft. Valentine Smith et al's Wm. Stone 1, D. Shaw sur, dr 415 ft. Witherspoon Oil Co.'s Wright 1, Pecan chalk 2714-3060 ft, Austin chalk 3544-3595 ft, sd 3666-72 ft.

TITUS COUNTY—Cook et al's Rogers 1, Moore sur, rig. C. M. Joiner et al's C. Brown 1, Bard Evans sur, sp and sd.

UPSHUR COUNTY — Arcadia Ref. Co.'s Johnson 1, J. H. Mallory sur, top Pecan chalk 2461 ft, dr 2800 ft. Bremen & Woods' Robertson 1, J. Stephenson sur, elev 390 ft, Pecan chalk 2640-3003 ft, top Austin chalk 3599 ft, sd 3600 ft. Joe Burnham et al's Lena Beck 1, H. W. Augustine sur, rig. Cockrell et al's C. L. Lee 1, W. L. Palmer sur, rig. W. T. Daniels et al's A. Callahan 1, E. A. J. Evans sur, dk. Verne Dumas Pet. Co.'s A. C. Phillips 1, S. Harrell sur, dk. Fleetborn Oil Corp.'s J. T. Edwards 1, D. Ferguson sur, Pecan chalk 2522-2969 ft, Austin chalk 3537-3582 ft, set cas on oil sand 3586-3609 ft. J. W. Greene et al (now Sorrels & Duffy's) Wooden 1, I. Williams sur, sp and sd. Home Oil Co.'s F. D. Futchell 1, A. Lumbrerra sur, rig. Humble O&R Co.'s Edwards 1, D. Ferguson sur, rig. Magnolia Pet. Co.'s H. Hampton 1, Ferguson sur, rig; Hampton 2, dk. McMahon et al's Hamilton 1, M. Chandler sur, dk. McPhail-Smith & E. B. Perkins' Kay 1, T. G. Elliott sur, top Pecan chalk 2601 ft, sd 2810 ft. Mrs. J. R. Richardson et al's O'Byrne 1, Wm. Bratton sur, lcn. A. C. Trammell et al's M. A. Victory 1, E. A. Evans sur, lcn. R. W. Weaver, Jr. & Stanolind O&G Co.'s L. J. Everett 1, W. Goodwin sur, rig.

VAN ZANDT COUNTY—Barton et al's C. L. Hubbard 1, M. J. Cadena sur, rig. Clifford Oil Co.'s H. F. Haake 1, John Hawks sur, rig. C. M. Joiner et al's J. S. Meeks-Randall 1, A. L. Dutcher sur, dr 1310 ft. Texas Chief Oil & Roy. Corp.'s Foster 1-A, F. Montgomery sur, dr 2315 ft.

WOOD COUNTY—Deep Rock Oil Co.'s M. Smith 1, Pecan chalk 2785-2895 ft, dr 3620 ft. Paul Vitek & Penn's Rosa Vogel 1, Sarah English sur, sp and sd. Wood County Dev. Co.'s M. M. Rick 1, D. Fuller sur, sd 1500 ft.

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls—barrels; b.s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr — straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; wosr—waiting on standard rig.

WEST TEXAS

Company, Well and Location	Initial Production Bbls.	Depth
STERLING COUNTY—		
W. C. Beasley et al, Foster 1-A...	*	2301

CRANE COUNTY—Cranfill Bros. Oil Co.-Gulf Prod. Co.'s J. B. Tubb 1, elev 2526 ft, salt 505-1400 ft, top brown lime 1410 ft, top white lime 2455 ft, pb from 5336 to 4503 ft for shot and fish liner, flowing 20 bbls oil daily. H. H. Sides et al's B. P. Nolen 1, elev 2355 ft, dr 740 ft.

ECTOR COUNTY—Galt-Brown Co. & Penn Oil Co.'s Cowden 1, elev 3047 ft, top anhydrites 1525 ft, salt 1535-2600 ft, top brown lime 3852 ft, sd 3860 ft. H. F. Wurtz et al's E. A. Ibbetson 1, elev 2840 ft, top salt 865 ft, co 3250 ft.

EL PASO COUNTY — Tri-State Oil Co.'s Bobadella 1, dr 645 ft.

FISHER COUNTY—Cranfill-Reynolds Co.'s Flanigan 2, elev 1810 ft, comp pumping 65 bbls oil and 5 bbls water from sandy-lime 3783-3800

ft. Stanolind O&G Co.'s Steele 2, elev 1873 ft, fsh 2940 ft. The Texas Co.'s J. A. Jean 1, dr 1460 ft. Texas Unity Oil Co.'s First Nat'l Bank 1, elev 1848 ft, dr by junk 2880 ft.

GAINES COUNTY—Landreth Prod. Corp.'s Nick Alleu 1, dr 1700 ft.

GARZA COUNTY—Garza County Dev. Co. (Penny & Porsey's) Justice 1, elev 2266 ft, top salt 550 ft, top lime 1825 ft, sd in sulphur water 2800-40 ft, td 2980 ft.

HOWARD COUNTY—Conoco & Group One Oil Corp.'s E. E. Brindley 1, elev 2530 ft, top salt 1170 ft, top lime 3077 ft, cem cas 3084 ft.

HUDSPETH COUNTY—H. H. Henshaw et al's G. W. Love 1, dr 285 ft. R. G. Patillo & Ed. Welch's K. S. Briggs 1, elev 4017 ft, sd 673 ft.

IRION COUNTY—Benedum-Trees et al's Sugg 1, dr 325 ft. Perry Fox et al's H. Horney 1, dr 1030 ft. Stanolind O&G Co.'s W. H. Williams 1, elev 2544 ft, dr 5790 ft. W. E. Newton et al's Horney 1, fsh 1590 ft.

JONES COUNTY—J. C. Abers & L. D. Pruitt's L. L. Burton 1, set cas 528 ft. Jake Croft-Conner & Tidal Oil Co.'s W. D. Swann 1, dr 1990 ft. Shaheen Oil Co. & Duffey's S. W. King 2, lcn. Tex-Mex Oil Co. & Eastland Oil Co.'s Brewer 1, dr 1840 ft. Union Oil Co.'s Hoyt 1, co with show oil in sand 1962-65 ft; S. W. King 1, machine. Andy Urban et al's Ed. Quinn 1, dr 1470 ft. Sam C. Yingling (Emerald Oil Co.'s) Coates 1, elev 1908 ft, ur 2355 ft. Young & McNeil's L. R. Cade 1, ur 2280 ft.

LOVING COUNTY—The California Co.'s J. C. Allen 3, elev 2741 ft, top salt 815 ft, dr 3055 ft; Allen 4, dr 3050 ft. Carl Cromwell et al's Russell 2, rig. Erwin & Mohres Dev. Co.'s Lillie Thorpe 1, sd 810 ft. Folbre & Evans' D. P. Dean 1, sd 1465 ft. Grisham-Hunter Corp.'s Dean 1, elev 2655 ft, sd 2040 ft. Henshaw et al's Reagan 2, rig. Pete Hoffman et al's Ramsey 2, elev 2678 ft, top salt 775 ft, dr 2860 ft; Ramsey 3, rig. Lewis & Slagel Drlg. Co.'s Cartwright-Henderson 1, elev 2901 ft, salt 585-2907 ft, top Delaware lime 3086 ft, top sand 3127 ft, pb from water at 3182 to 3156 ft and shut off oil prod. Lockhart & Co.'s I. J. Bell 1, elev 2705 ft, top salt 770 ft, dr 4125 ft. H. W. Martin et al's Wheat-Ramsey 2, rig. Fred H. Meyer et al's W. B. Lind 1, rig. Richmond Drlg. Co.'s Wheat-Ramsey 1, elev 2678 ft, top salt 765 ft, dr 3550 ft. W. A. Sudderth & James' Capitola Pool 1, rig. F. S. Tennant et al's Roy Martin 1, sd 630 ft. West Texas Pet. Co.'s Allen 2, top salt 810 ft, co 4110 ft.

MENARD COUNTY—L. G. Priest et al's Sorrells 1, elev 2279 ft, ur 2855 ft.

PECOS COUNTY — W. B. Hagan et al's Shearer 1, elev 2426 ft, top salt 1035 ft, dr 1810 ft. Penn Oil Co. et al's J. B. Alvis 1, elev 3493 ft, show oil and gas with sulphur water 3601-02 ft, dr 3605 ft. Penn Oil Co. & Honolulu Oil Co.'s R. D. Webb 1, elev 3054 ft, dr 675 ft. W. F. Whittaker & Calloway's Devlin 1, elev 2706 ft, sd 455 ft.

REEVES COUNTY — The California Co.'s Kloh 2, show gas in top Delaware shale 4415 ft, dr 4490 ft. Humble O&R Co.'s Balmorlea 1, dr 850 ft. Lee O. White et al's Mrs. Hersheusen 1, dr 4505 ft.

RUNNELS COUNTY—Chas. Dutton et al's Dean 1, re-set cas at 1925 ft, co 2335 ft.

SCHLEICHER COUNTY—Eastland Oil Co. Unit Plan's Tisdale 1, elev 2295 ft, sd 2510 ft. J. D. Wesner et al's Ratcliff 1, elev 2408 ft, dr 3880 ft.

SCURRY COUNTY — R. B. Pender O&G Co.'s Davis 1, elev 2208 ft, top salt 445 ft, sd 5115 ft. Seifert & Dibble's Blackman 1, top salt 720 ft, sd 3390 ft. Simons & Brock's F. Kruse 1, sp and sd.

TAYLOR COUNTY — Adams-Ferguson & Hobbs' Lowe 3-A, dr 2260 ft. J. B. Jameson et al's Webb 1, elev 1905 ft, sd 6396 ft.

TERRELL COUNTY—Leonard Jones et al's Peckenham 1, elev 2587 ft, sd 1245 ft.

UPTON COUNTY—Duffey et al's McClintic 5, rig. Gulf Prod. Co.'s McElroy 94, elev 2714 ft, top salt 1145 ft, dr lime with 1200 ft oil in hole at 2950-3020 ft. Mintex Oil Co. & Harry Baldwin's Lane 1, elev 2743 ft, top salt 738 ft, sd 2130 ft. Porter Rankin et al's Cordova 1, lcn.

WARD COUNTY—Alpine Oil & Dev. Co.'s Boogher 3, elev 2741 ft, top salt 810 ft, dr pay 2147-2212 ft. Beckley et al's Johnson 1, dr 1965 ft. Bell & Wier's Boogher 1, top salt 800 ft, flowing 25 bbls heads 2187-2230 ft, dr 2250 ft; Boogher-Cummings 1, top salt 785 ft, sd 1950 ft. Buster Black et al's Halls-Roberts 1, dr 1050 ft. Alex Bradford et al's B. Carson 1, elev 2457 ft, top salt 820 ft, dr 2050 ft. Clyde Bradford et al's Hordage-Wilson 1, elev 2544 ft, top anhydrite 775 ft, top salt 1027 ft, flowing 65 bbls daily by heads 2317-2475 ft. Bradford & Abell's E. R. Allen 1, machine. The California Co. & Atlantic's A. B. Gordon 1, elev 2523 ft, top salt 1000 ft, pb from 2599 to 2462 ft and swab 7¼ bbls oil 5 hrs. Central Gas & Oil Co.'s Lee Monroe 1, sp and sd. Gibson Bros. et al's Johnson 1, elev 2432 ft, top salt 720 ft, dr 1670 ft. Gulf Prod. Co.'s Hutchings 7, elev 2648 ft, top anhydrite 910 ft, top salt 1162 ft, flowed 122 bbls oil 2490-2650 ft; Hutchings 8, rig; O'Brien 17, top salt 1085 ft, top lime 2323 ft, showing oil and gas 2550-2632 ft. Hankinson et al's A. Emory 1, top salt 840 ft, dr 900 ft. Magnolia Pet. Co.'s Sealy-Atlantic 1, elev 2686 ft, top anhydrite 1505 ft, sd flowing sulphur water 3067-3130 ft. Moran & Burkhart et al's J. T. Sweatt 1, rig. R. F. Owen et al's Johnson 1, elev 2499 ft, top salt 1600 ft, dr 4800 ft. Peck et al's Geo. Merritt 1, flowing 50 bbls oil 2155-86 ft. Rector Oil Co. et al's J. S. Smith 1, sp and sd. Shipley Oil Corp.'s Monroe 1-A, elev 2655 ft, top salt 2485 ft, fsh in salt 4355 ft; Hayzlett 5, sd 2507 ft. Simms Oil Co.'s M. Himmel 1, elev 2514 ft, top salt 965 ft, show oil and fsh tools 2246-95 ft. E. E. "Buck" Sturm et al's R. H. Hill-Jones 1, top rustler lime 640 ft, top salt 835 ft, dr 1610 ft. White et al's Owenby 1, top salt 795 ft, fsh 2035 ft.

EAST TEXAS

Completions

HARRISON COUNTY—
William Atkinson, Hays 1, J. C. Chappin sur . . . . . * 2875

MARION COUNTY—
Trammell et al, Hussey 1, Chas. Lockhart sur . . . . . * 1878

HARRISON COUNTY — Hunter et al's Daugherty 2, W. B. Burris sur, 12½ cas 245 ft, ta in Georgetown 3563 ft. O. H. Parkening's T. J. Taylor 1, Walter H. Payne sur, elev 200 ft, 12½ cas 215 ft, fsh ds 1750 ft. Rowan & Nichols' Bussey 1, E. A. Merchant sur, top Nacatosh 1995 ft, top PG 2310 ft, dr 3390 ft. Crump & Hannagan's Dunn 1, Bettie Humphries sur, elev 330 ft, ta 4006 ft. Siegel Bros. et al's T. J. Taylor 1, F. O'Neal sur, lcn. Banner et al's Lowrey 1, W. O. Stanfield sur, top Nacatosh 1700 ft, top PG 2136 ft, cored Blossom sand showing oil 2797-2805 ft, 6-inch 2797 ft, sd repr boiler, td 2814 ft. Ryan Cons. Pet. Corp.'s H. H. Key 1, E. Carroll sur, rig (Trinity test planned). Everts Drilling Co.'s Sypert 1, Richard Hooper sur, no Nacatosh, top PG 2154 ft, sd 2675 ft. J. M. Gholson's Bivins 1, T. K. Pearson sur, rig. Olford et al's Bolding 1, W. O. Stanfield sur, base Nacatosh 1820 ft, sd in sandy shale 2020 ft. William Atkinson's Hays 1, J. C. Chappin sur, 10-inch 195 ft, top Blossom 2430 ft, dry thru ds 2430-70 ft, top Georgetown 2850 ft, dry abn in Georgetown lime, td 2875 ft. Thomas & Kinsey's J. R. Watson 1, Thomas Iden sur, dk.

MARION COUNTY—Trammell et al's Hussey 1, Chas. Lockhart sur, elev 282 ft, top chalk 1771 ft, 8¼ cas 1514 ft, junked abn, td 1878 ft. Rondeau & Hindman's McGaugherty 1, W. J. Wills sur, dr 2750 ft. Hindman et al's Alex Lindsay 1, Alex Albright sur, sd 400 ft. J. W. Hamilton's Wood 1, Alex Albright sur, sd 400 ft. Gist, Claunch et al's Laun 1, Henry Fugham sur, rig. Sheldon et al's Brown 1, R. B. Fowler sur, cemtd 12½ cas 519 ft.

PANOLA COUNTY—Bell et al's Burnett Lbr. Co. 1, S. B. Hendrick sur, elev 186 ft, sd 3335 ft. Dillon & Bradham's Baldwin 1, Hampton West sur, 12½ cas 43 ft, claim top PG 1500 ft, sd 1555 ft. United Prod. Co.'s Steele 17, B. C. Jordan sur, lcn (Trinity test). Werner 10, B. C. Jordan sur, dr lime 3055 ft. (Trinity test). Southwestern O&G Co.'s Vinson 1, C. T. Anderson sur (owdd), dr 2850 ft. Daisy O&G Co.'s Rucks Hrs. 1, Jno. Palmer sur, 12½ cas 780 ft, top chalk 1352 ft, 8¼ cas 1900 ft, dr 3580 ft. Texas Co.'s Brumble 12, Jno. Womack sur, 10-inch 1200 ft, 6⅝ 4450 ft, tested est 1 mil ft gas, td 4792 ft, arr deepen. Everett Prod. Co.'s McDaniel 4, Alamson Barr sur, wo 6⅝ cas, claim 30 ft bro sand showing gas, td 1315 ft. Moses & Wallace's C. L. Daniels 1, Isabel Hanks sur, dk. Hoffer et al's Cameron 1, W. A. LaGrone sur, dk. Davidson et al's Latham 1, G. F. Penn sur, dr 250 ft. Ark. La. P. L. Co.'s Werner 14, B. C. Jordan sur, rig (Trinity test). Nelson et al's Williams 1, Jas. Hanks sur, dk.

SHELBY COUNTY — Sloane Prosp. Co.'s T. B. Sandford 1, M. M. Vann sur, 12-inch cas 300 ft, dr 1970 ft; Windham 1, A. H. English sur, elev 307 ft, 10-inch 180 ft, cored Blossom sand showing oil, tested dry small show sw with 22 ft sand at 2680 ft, dr sandy shale 3010 ft. Chapparral Oil Co.'s Holt 2, Matthew Moore sur, sd 3111 ft. E. L. Chapman's Pickering Lbr. Co. 1, C. F. Henry sur, 10-inch 240 ft, dr lime 3440 ft. Maulding et al's Frost Lbr. Ind. 1, A. B. Fountain sur, 12½ cas 500 ft, sd changing rigs, td 1610 ft. H. H. Gracey's J. A. Morrison 1, Wm. English sur, dr 550 ft. I. M. Bradley et al's J. J. Asberry 1, G. W. Mitchell sur, dr hd chalk 2130 ft. T. A. Martin's J. A. Bush 1, Alfred Lindsay sur, mov in rig. Joiner et al's Foster & Billingsley 1, J. Bowlin sur, dk. Schultz et al's Hughes 1, J. Clay sur, 10-inch 80 ft, dr 1500 ft.

SOUTH TEXAS

ATASCOSA COUNTY—Geo. Keith's Mrs. Geo. M. Martin 1, 3 mi s Amphion, prep to spud.

BASTROP COUNTY—Schimmel and Batts' (Texas Petroleum Co.) Williams 1, 2½ mi s Yost field, 6 mi n Lytton Springs, prod between 5 and 6 bbls oil, topped serpentine abt 1870 ft, total depth 1997 ft; William 2, lcn being made. Smith and Burns' Margurger, King and Millet sur, no report.

BEE COUNTY—Grebin and Woods' Riggs 1, James Nowland sur, six and one-half mi w Skidmore, 2 mi from Live Oak line, prep to spud. Alexander et al's McFall 1, 3 mi s Skidmore, reaming below 1205 ft. Gulf Coast Oil Co.'s (Moody-Seagraves Producing Co.) McKinney 2, near No. 1 in Geo. Habbermacher sur, 3 mi n Pettus pool, csg set 3715 ft, td 3730 ft, gasser, show 1100 lbs pressure. Davis et al's Geo. Ray, 1 mi s Pettus townsite, ne cor Ray 30-acre tract, prep to spud. J. S. Mauldin's Mauldin 1, just s Pettus townsite, George A. Kerr sur, wait on csg, total depth 3682 ft. United Prod. Co.'s Ray 38, 900 ft e production, T. Hanson sur, test sw 3973-79 ft, abn; Ray 37, 1 mi e production, Willis A. Moore sur, dr 2185 ft.

BEXAR COUNTY—Penn Oil Co.'s Pollok 1, Cooksey pool, Rialls sur, 11 mi e San Antonio, set csg 1378 ft, wait on cement. Camp and Humble O&R Co.'s Chavez 1, near Elmendorf, fsh 2250 ft. Russell and Moore's A. O. Mills 3, Navarro sur, 10 miles se San Antonio on Somerset road, sd 938 ft. J. Morgan Russell's Price-Stort 1, Navarro sur, 10 mi se San Antonio, sd 1175 ft. Euchert et al's Palfrey 1, 7 mi se San Antonio, near Brocks field, sd 1805 ft.

BROOKS COUNTY—The Texas Co.'s Allen Land and Cattle Co. 1, San Antonita Grant, dr 1400 ft. Howeth et al's Singer 1, sur 436, 400 ft e Humble Singer 1, sand 851-57 ft, showed little oil.

CALDWELL COUNTY — J. E. Mills and Chapman's McMahon 1, 6 mi se Lockhart, Pinchback sur, dr 2385 ft. Rayor et al's Dunlop 2, near Luling, mov on. Ralph Ogden's O. S. Alexander 1, 10 mi se Lockhart, topped Edwards 2330 ft, td 2338 ft, good show of oil, make d. s. t.

DUVAL COUNTY — Humble O&R Co.'s Kobler 50, Kohler pool, sur 164, sand 6009-87 ft, 9⅝ inch csg set 6021 ft, test sw, now dr at 6110 ft. O'Byrne et al's Weil Bros. 1, BS &F sur No. 568, 7 mi sw S&O pool, rep boiler 1720 ft. S. J. Carpenter (Gus Pape's) Juan Benavides 1, blk 38, sub No. 1, of Carpenter sub, Mesquite grant, sand 1665-69 ft, show oil, 6⅝ inch cas set 1665 ft, wait on cement. Magnolia Pet. Co.'s W. Benavides 1, sur 172, coring 2270 ft. Coffee et al's Jose Garza 1, center sur 49, Garza Irrigation Co., sd 900 ft.

GOLIAD COUNTY—Gibson Oil Co. & Ben-

Just Off the Press

PETROLEUM DICTIONARY

for

Office, Field and Factory

by

HOLLIS P. PORTER

Member of

American Society of Mechanical Engineers.
American Petroleum Institute.

FIRST EDITION

Before deciding to publish this dictionary, a thorough search was made by the author while preparing lectures to be delivered to the students of the Petroleum Engineering School of The University of Tulsa, which revealed that there was no publication which defined in a satisfactory manner many of the words and terms used in the several departments of the petroleum industry. It was also observed, that many employees in offices were in need of a ready reference which would give them some light as to the meaning of technical as well as non-technical expressions, and words so often found in correspondence by and between individuals of the several departments of the industry. These facts furnished the inspiration for this publication. It is often difficult, and in many cases impossible, even with the best library facilities to find definitions for many of the words which have recently been introduced. This may cause some difficulty in understanding the meaning to one unfamiliar with the subject, or, to a particular branch of the industry.

This dictionary is offered to those who are employed or interested in the petroleum industry for the purpose of removing this difficulty.

---

234 Pages — Cloth —Six by Nine Inches

Price $3.00

Send order to the

GULF PUBLISHING COMPANY

P. O. Box 1307 Houston, Texas

edum and Trees' Parks 1 (wo), 5 mi ne Goliad, sbn, td 5267 ft, showed oil and gas at 4520-41 ft, lcn to be made for another well, lease not yet announced.

GUADALUPE COUNTY—W. J. Walton's Zobrowski 1, 500 ft s of Guadalupe and ½ mile n of original Zobroski well, dr 1035 ft. Harry Bruner's Sherrell 1, Geo. Allen League, near Staples, dr 650 ft. J. E. Linne 1, 8 mi sw Seguin, 5 mi s Marion, lcn.

HIDALGO COUNTY—Dayle B. Smith Oil Co.'s Fernandez 5, 21 mi w McAllen, repaired equipment, prep to make another test, td 4026 ft.

JIM HOGG COUNTY — DeWitt and DeWitt's Tefilo Gomez 1, sur 12, sd 200 ft. Mag. Pet. Co.'s Y. V. Cuelar 1, blk 92, W. A. Dannelley sub, sur 575, share 2, El Peyote grant, dr 4212 ft. P. & M. Oil Co.'s (Peterman and Minahan) Palacios 1, 3 miles se Randado field, blk 14, sur 231, to re-dr 1360 ft.

JIM WELLS COUNTY—Carsil O&G Co.'s McGill 2, Wm. D. Baldwin sur, 3 mi n Armagosa, 12 mi sw Larcro's Wade gasser, 900 ft due n McGill 1, abn 3004 ft; McGill 3, 900 ft due s McGill 1, to make lcn.

KERR COUNTY—Halbert and Herbert's J. D. Witt 1, W. H. Hamilton sur, sec 1923, spudded. Col. B. M. Hatridge's W. R. Rischworth 1, (Neely & Halbert), sec 1459, 2 mi se Center Point, sd 117 ft; Westland 1, blk 23, Westland addn, Kerrville townsite, temp abn 461 ft; Duderstadt 1, in reservation, Harper area, mov on. Evans and Sprinkle's Jeff Love 2, sw cor sec 1593, one-half mi se discovery well, to spud. Evans and Gant's Seiker and Mears 1, sw cor sec 1605, CCSD&RGNR Ry sur, 2 mi ne Love test, dr 1900 ft.

KLEBERG COUNTY—Barbee and Hunter's Finnegan 1, 7 mi s Kingsville, near Recardo, erect steel dk.

LA SALLE COUNTY — Fred W. Volz's Coleman 1, blk 15, sur 514, sd 40 ft.

LIVE OAK COUNTY — Burke Greis Oil Co.'s Geo. West 1, 10 mi w Geo. West townsite, James Vaughan sur, dr 2520 ft. Houston Oil Co.'s Cartwright 23, east of Cartwright 11, Sandman sur, dr 978 ft.

McMULLEN COUNTY—Camp and Stanolind O&G Co.'s Murphy 1, 1½ mile ne Massey 1, spudded, now dr 435 ft.

ABBREVIATIONS

NOTE—The following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million feet of gas; abn—abandoned; bbls—barrels; b.s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in.—inches; lcn—location; m—milling; n, s, e, w—north, south, east, west; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—underreaming; wo—workover; wosr—waiting on standard rig.

NUECES COUNTY — Calallen O&G Co.'s Frank C. Allen 2, 550 ft e of Allen 1, near Callalen townsite, dr 2108 ft. Gulf Coast Oil Co.'s Harrell 1, ¾ mi n Sedwick well, pres n prod of field, GC&SF sur, sec 311, blk 32, sand 4084 ft, showed gas, 600 lbs. in 10 minutes, drill stem test. L. L. Smith, Inc.'s Hunter 1, e of Sedwick well, Rincon del Osa grant, dr 3716 ft, show sw. Saxet Oil Co.'s Dunn 8, 1000 ft n and e of Dunn 7, sand 4277 ft, show 5 fourbles oil, no water, testing. Houston Oil Co.'s Harrell 2 (Lawrence 2), 2 mi nw main field in extreme se corner of John Dunn sur, 312, topped sand 2725 ft, drilled to 2740 ft, blew in wild May 19, wrecked derrick, blew 1700 ft of drill stem from hole and still running wild May 25, showing lot of gas and spraying some oil, well originally was completed as a gasser at 1659 feet, but deepened to lower horizon; Morgan 2, completed as producer at 4095 ft several months ago, drilled deeper, dr 4365 ft, sticky shale.

REAL COUNTY — Gant and Kilgore and Eastland Oil Co.'s Dan Auld 1, sec 23, CCSD & RGNR Ry. sur, 3 mi sw discovery well, running csg to 3310 ft. Evans and Sprinkle's Haby 1, dr 1950 ft.

REFUGIO COUNTY—Humble Oil and Ref. Co.'s D. M. O'Conner 1, abt 300 ft w of river bridge between Refugio and Victoria County lines, dk.

SAN PATRICIO COUNTY — Saxet Oil Co.'s White Point Development Co. 4, White Point field, cored salt water sand 5188 ft, well showed sw in sand from 4942-53 ft, csg set 4942 ft.

STARR COUNTY—B. B. Tips' Frank Doyno 1, lower tract No. 4, Porcion 81, set 12 inch at 332 ft, now sd. Sacramento O&G Co.'s Seabury et al 1, sand 411 ft, tested dry, now shut down. Los Olmos Oil & Gas Co.'s Kelsey-Bass 4, blk 7, sub of Porcion 75, 76, 77, Jurisdiction of Camargo, sand 407-21 ft, showed oil, casing set 407 ft, wait on cement.

VICTORIA COUNTY—Houston Oil Co.'s Konrad 1, Beck salt dome, n Victoria, T&NO sur, ru. Simpson Fell Oil Co. & Westheimer et al's Levi 1, 6 mi ne Slick well, dr 3640 ft. T. B. Slick Estate's McFadden 1, J. Barian sur, 3 mi ne McFadden pool, showed 650 lbs. pressure on ¾-inch choke in 3 minutes, sand 3502-12 ft, set 9-inch csg 3502 ft, wait on cement. The Texas Co.'s McFadden 3, lcn. United Prod. Co.'s McFadden 4, 3000 ft nw discovery well, dr 648 ft.

WEBB COUNTY—Cole Pet. Co.'s (Carson) Benavides 2 (4), sur 1601, dr 1900 ft. Eugene Garner, Jr.'s Billings 1, nw ¼ of ne¼, sur 71, lcn.

ZAPATA COUNTY—Benson Oil Co.'s S. Vela 1, blk 12, sur 259, dr 2325 ft. E. C. Brogan's Montemayor 1, blk 11, sur 64, abn 2000 ft; Montemayor 2, blk 11, sur 64, lcn. W. T. (Bill) Henry et al's Gopher Trust Estate 1, blk 10, sur 4, Fullerton sub of Share 8, Borrego Grant, re-dr 1400 ft. O. W. Killam's Cuellor 40-C, sur 278, Cuelar pool, lcn abn; Bustamante 8, blk 7, share 5, Fansler Partition, Comitas grant, sand 1246-53 ft, showed oil, casing set 1246 ft. National Oil Co. of Texas' Luther et al 1, blk 97, Da Pron sub, ne¼ Porcion 6, sd 590 ft. Penny Prod. Co.'s Juan V. Cuellar Jr. 1, blk 1, sur 2, Pappas sub, Porcion 33 and 34, dr 2040 ft. F. A. Talmadge and G. Mackenzie's G. F. Trevino 1, blk 6, sur 4, Marts and Beavens sub of Porcion 2 and 3, sd 519 ft. T. H. Ward's Uribe 1, blk 8, sub of share 7, Partition 6, Trinidad Uribe Partition of Juan V. Borrego Grant, prep to spud. Allied O&G Co. & Allen and Morris' E. Gutierrez 15, share 4, Fansler Partition, Comitas Grant, rock 1474-75 ft, sand 1475-78 ft, rock 1478-81 ft, testing. Trevino Oil Corp.'s I. G. Trevino 9, sur 412, dr 1200 ft.

TEXAS GULF COAST

ANGELINA COUNTY—R. D. Moore's Abney Estate 1, sd 1350 ft. Pollock Oil Co.'s Sessions 1, Garza Sur., sd 3200 ft.

AUSTIN COUNTY—O'Hara et al's Schrader 1, Hacienda Sur., fsh 3900 ft. Empire's Kunze 1, San Felipe, dr 7700 ft shale. Parmeson & Cafferkey's Scholeckte 1, Fitzgibbons Sur., dr 1100 ft shale.

BELL COUNTY—Mildon Oil Co.'s Edds 1, 6 mi e Temple, sd 400 ft chalk. Winana & Elswick's Mosley 1, 9 mi se Temple, sd 1900 ft. O. O. Oldford et al's Spankle 2, lcn. Riley et al's Mosley 1, 1 mi w Heidenshamer, sd 1100 ft clay.

BRAZORIA COUNTY—United Oil Synd.'s Speer 1, 3 mi n Danbury, tested sw 1865 ft. D. C. Wellock's Hammon 1, Damon Mound, dr 400 ft gumbo. The Texas Co.'s Belcher 1, s of Manvel, dr 900 ft sand and bldrs.

BURLESON COUNTY — Mid South Oil Co.'s Duckworth 1, sd 2640 ft.

CALHOUN COUNTY — The Texas Co.'s Smith 1, Chocolate Creek, dr 5270 ft shale.

CHAMBERS COUNTY — Pure's Mayes 13, Lost Lake, dr 4040 ft shale.

COLORADO COUNTY — United N & S Dev. Co.'s Lockwood 1, dr 4900 ft shale.

FAYETTE COUNTY — Elam & Reynolds' Florence 1, dr 1400 ft shale.

FORT BEND COUNTY—Cullen & West's Lockwood 1, comp. for 450 bbls. 3089 ft. Telshaw, Cady et al's Blakely 1, Blue Ridge, prep to set casing. Gulf's Moore 29, Moores Field, dr 3790 ft shale.

GALVESTON COUNTY—Yount-Lee's Cade 20, ru; Cade 21, dr 3550 ft rock.

SYSTEMATIZING THE OIL BUSINESS

By G. H. BESSIRE

This System, prepared by Mr. Bessire after a number of years of experience in the oil industry and specialized study of systems pertaining to the business, fully meets the requirements of oil companies, independent operators, drilling contractors and bookkeepers. It takes up all phases of the leasing and producing branches of the oil business from an accounting standpoint.

It is invaluable to new organization as it takes up all of the problems of a corporation and a stock company from the time the charter, articles of association or trust agreement is received, until the business is liquidated, including process of liquidation. This System also contains field and office forms and the names of the different books necessary to carry on the business intelligently.

It contains detailed information on the following and other subjects: Stock Companies Incorporated and others. The Oil Business in general. The opening of your books, including the names of the accounts most generally used with a complete analysis of each account and examples of proper entries. Leases, Lease Rental Payments, with letters and forms for properly taking care of this matter, Lease Development (Drilling Wells) with complete instructions for taking care of this matter from the time the location is made until it is brought in either as a producer or a duster. With detailed instructions for the proper charging of the different expense and investment items so as to receive the most benefit from an INCOME TAX standpoint. Also the proper method of handling production from the time the well comes in until it is marketed. The Purchase Requisition, Warehouse, Taxes, Repairs and Replacements, Checks, Filing and valuable office tips, including employees schedule, Furniture and Fixtures, Stationery and Printing, Purchasing Department and Drilling Equipment and Oil Well Supplies.

It teaches the accounting department how to gather, compile and properly present to the executive officer that information in regard to the different departments of the business which will enable him to carry on the business more intelligently, and this information will be given to him so as to be available at all times, even after office hours and it will come to him in a form which will make it easy for him to carry with him on his field and business trips. In fact, it will place his business at his FINGER TIPS.

This System will not conflict, but will add to any system now in use without causing expenditure for extra books, and it can easily be installed by any one having a knowledge of double entry bookkeeping.

PRICE POSTPAID—$5.00

***Send Check to the* GULF PUBLISHING COMPANY**

P. O. BOX 1307, HOUSTON, TEXAS

GRIMES COUNTY—Rianjo Oil Co.'s Cuthrell 1, 3 mi e of Carlos, lcn.

HARDIN COUNTY—Plummer & McDaniels' Reed 1, 6 mi e Sour Lake, lcn.

HARRIS COUNTY—Hattie Baldwin's Krahn 1, 3 mi n Cypress, lcn. Baldwin et al's Fritz 1, rm 450 ft. Humble's Minnetex 5, Mykawa, ru; Minnetex 6, dr 4860 ft sand and shale, slight oil show. Kepley Oil Co.'s Prud. Inv. Co. 2, Pierce Junction, lcn. Rio Bravo's Settegast 21-A, comp for 2500 bbls. 4205 ft; Settegast 22-A, lcn.

HOUSTON COUNTY—A. E. Winfree's Hodges 1, Russell Sur., dr 2200 ft.

JACKSON COUNTY — Chicago Gulf Co.'s Rodgers 1, Edna, gas sand 3850 ft.

JEFFERSON COUNTY—Humble's McFeddin 1, 8 mi e Big Hill, rm 7630 ft. The Texas Co.'s Pipkin 4, Big Hill, stdg 5900 ft.

LEE COUNTY—Wheeler et al's Stoltz-Frede 1, 3 mi nw Lexington, sd 1900 ft. Burt et al's Sanders 1, sd 3120 ft.

LIBERTY COUNTY—Cranfill-Reynolds' Davis 7, Esperson, dr 5000 ft shale and lime. Harrison Oil Co.'s Jones 2, dr 1350 ft sand. M. L. Gray's Schindler 1, North Dayton, abn 800 ft.

MATAGORDA COUNTY—Cockburn et al's Hawkins 3, Shepherds Mott, dr 1700 ft gumbo. Empire's Booker 1, Citrus Grove, dr 6280 ft shale.

MILAM COUNTY — Red Bank Oil Co.'s Foster 1, dk. Rhoenbotham et al's Johnson 1, fsh 2105 ft.

MONTGOMERY COUNTY—Lowrie & Young's Sunday 1, 4 mi n Pinehurst, lcn. Mike Hogg's Hunt 1, s Conroe, dr 2100 ft shale. Wilhite & Hornbeck's Lieberman 1, 2½ mi w Conroe, dr 3920 ft.

ORANGE COUNTY—Crews Oil Co.'s Mansfield 1, Stephenson Sur., abn 1412 ft.

POLK COUNTY—Freeman et al's Freeman 2, dr 3000 ft sand and shale.

TYLER COUNTY—L. H. Wentz's Mann 1, 2 mi sw Colmesneil, lcn.

WASHINGTON COUNTY—Penn-Tex Oil Co.'s Kamas 2, Brenham, dr 2950 ft shale. Sun's Carroway 5, Gay Hill, dr 1770 ft shale, Janner 6, ru; Janner 5, prep. to pump. Brenham Salt Dome Deep Test Oil Co.'s Kramer 1, dr 1980 ft shale. Yegua Oil Co.'s Graves 1, 3 mi n Independence, dr 1430 ft shale.

WHARTON COUNTY—H. H. Givan's Hudgins 3, sd 1890 ft. Rose Texas Oil Co.'s Floyd 1, Austin Sur., lcn.

WYOMING

CARBON—Widwest Refining Co.'s U. P. 1, 27-11-81, dr sandy shale 2380 ft. P & R, 19, 20-83, moving in and sp. P & R 7-25-86, dr 1730 ft.

FREMONT—Texas Prod. Co.'s State 1, 36-33-95, sd for orders 4485 ft. P & R 1, 33-34-92, dr 5240 ft. Ward Oil & Gas Co., 28-34-90, dr below 2100 ft. Wiebolt et al, 2-35-99, dr below 1525 ft in red beds.

HOT SPRINGS—Grebo Roy., Inc., 3-47-100, dr 700 ft.

NATRONA—Summit Oil Co., 21-33n-80w, sd 1220 ft. Midwest's 11, 32-34n-77, sd 5340 ft. Cuyler Oil Co., 23-36n-85w, water 1259 ft, td, to dd. Golden West Oil Co., 36-36-81, co 1265 ft. Midwest's Midway 1, ne 23-36n-79w, plug back to 5959 ft, cemt.

NIOBRARA—West Virginia Synd., 7-35-62, td 987 ft, cas trouble. Phillips Pet. Co., sw se 32-34n-64w, oil show 375 ft.

PARK—Resolute Oil Co., 17-57-101, dr 8535 ft and flow by heads.

WASHAKIE—Ohio Oil Co., lot 14, 19-45-92, dr 4600 ft.

WESTON—Le Favre Oil Synd., se 29-45n-68w, prep to cemt 15½-in cas at 1000 ft. Gose Oil Synd., 28-47-65, resume 4900 ft.

NEW MEXICO

CHAVES—Warman Oil Trust's Stebert 1, ne 27-13-24, sd 2685 ft. Neal et al's Russell 1, nw 21-14-25e, ds 2320ft.

DE BACA—Matador Oil Co.'s Wood 1, se 6-4n-20e, ur 6⅝-in cas to 3070 ft.

GUADALUPE—N. M. Prod. & Ref. Co.'s McMullen 1, 24-5n-16e, dr 65 ft.

HARDING—Kummbaca O&G Co.'s Kerlin 1, se 34-21s-30e, dr 1245 ft.

LUNA—Angelus Oil Mining Ass'n 1, se 20-21s-10w, waiting cas, 6085 ft.

McKINLEY—J. W. Halsell's 1, 17-18-9w, sd 3255 ft. Williams et al's A. T. S. F. 1, se 19-18n-8, sd, 19-18n-8, sd 1900 ft. United Kern Pet., Inc., sw 1-18n-11w, lcn. Dysart et al's Dysart 2, ne 14-14n-10w, prep to set 8¼-in cas at 1285 ft.

MORA—Fulton Pet. Co.'s Santa Fe Diox-Ice Co.'s Wagonmound 1, ne 14-19-21, dr 900 ft.

OTERO—Ernest et al's 1, se 20-25s-7e, waiting for equip at 1005 ft. Pasotero Oil Corp.'s Evans 1, sw 22-24s-12e, moving in.

RIO ARRIBA—Berrenger et al's Hartman 1, ne 8-29n-7w, sd 825 ft. San Juan Pet. Co.'s Gov't 1, se 14-30n-7w, sd 250 ft. Governador Oil Co.'s 1, se 12-29n-7w, carry 8¼-in cas at 880 ft.

ROOSEVELT—Peterson et al's Good 1, ne 32-5s-30e, moving in.

SAN JUAN—Kutz Canon O&G Co.'s Day 1, se 20-28n-10w, dr 3172 ft. Rio Grande Dev. Co.'s 2, 9-29-11, sd 1515 ft. Continental Oil Co.'s Rattlesnake 24, 1-29n-19w, fsh for dr pipe td 4730 ft. San Juan Leaseholds' Bowman 3, ne 30-30-15, sd 2685 ft. Reserve Oil Co.'s Reserve 3, se 36-22n-14w, ur to 748 ft. R. C. Oswell et al, nw 34-30n-11w, dr 385 ft.

SAN MIGUEL—Pioneer O&G Co.'s Thunderbird 1, nw 14-15n-16e, waiting 2340 ft. Starr Oil Co.'s Adams 1, ne 25-17-16e, dr 3475 ft. Cibola Pet. Co.'s Crown 1, se 9-13n-14e, prep to res, td 750 ft. Hershfield Dev. Co.'s Cabra Springs 1, ne 12-12n-22e, prep to res 1415 ft. Co-O-Kul Oil's Cherryvale 1, ne 34-17n-21e, dr 730 ft.

SANTA FE—Jones, Owsley et al's Cantwell 1, 5-10n-9e, sp 55 ft.

TORRANCE—Williams et al's Staplin 1, ne 16-8n-10e, ready to res 1643 ft. J. B. Witt O&G Co.'s Ketchum 1, 12-7-7e, test prod 1230 ft.

VALENCIA—Acme Oil Co.'s N. M.-Ariz. Land Co.'s 1, 26-6-3, install rotary at 5000 ft.

COLORADO

ADAMS—N. M. Slatt's 1, se 27-26-64w, carry 6⅝-in cas at 3430 ft.

ARAPAHOE—Fsh tools 5805 ft.

BACA—A. R. Jones Oil & Optg. Co.'s Boice Cattle 1, 22-34-42w, sidetr cas at 4965 ft.

EL PASO—Utemore Synd.'s Cannon 1, ne 10-16s-66w, sd 1125 ft.

GRAND—Oil Mineral Land Inc.'s McElroy 1, sw 14-2n-81w, sd 545 ft.

HUERFANO—Parker Club, Inc.'s Fee 1, se 4-8s-68w, run 5 3/16-in cas, td 4116 ft.

JEFFERSON—Ruby Hill O&G Co.'s Braden 1, se 24-4s-59w, dr 3915 ft.

LAS ANIMAS—Oklahoma Dr. Ass'n's Radcliffe 1, ne 28-26-52, sd 100 ft.

LA PLATA—McGarr Pet. Co.'s Pinon Mesa 1, ne 34-33n-12, lcn. Klem Pet. Corp.'s Olbert 1, se 9-25n-12w, sd 3125 ft. Murchison Oil Co.'s Doescher 1, nw 29-33n-12, prep to res.

LINCOLN — Eastern Colorado Oil Corp.'s State 1, 36-14n-57w, ur 4¾-in cas to 3380 ft.

MONTEZUMA—G. H. Talcott et al's McElmo 1, 7-35n-16w, sd 635 ft. Haller et al's Carr 2, sw 33-36n-14w, on second hole, td 310 ft.

MONTROSE — Uncompahgre O&G Co.'s Title & Trust 2, 27-50n-10w, dr 910 ft.

MORGAN—Ind. Terr. Illum. Oil Co.'s State 1, ne 16-1n-57w, sd to install rotary 4090 ft.

PUEBLO—Anchor Oil Co.'s Easley 1, sw 35-22s-57w, dr 532 ft.

PARK—So. Park Oil Co.'s Milligan 1, se 13-8s-76w, dr 2035 ft. So. Park O&G Co.'s Easche 1, ne 5-9s-76w, dr 2225 ft.

RIO BLANCO—California Co.'s Raden 1, se 30-2n-102w, prep to sp. Magnolia Pet. Co.'s Maddock 1, se 9-2s-96w, moving in.

WASHINGTON—Middlemist Oil Co.'s Middlemist 1, se 14-4-56, sd 1510 ft.

WELD—Reiter-Foster and Platte Valley Pet. Corp.'s Johnson 1, nw 24-6n-61w, dr 3000 ft.

MONTANA

CASCADE—Andover Oil Co.'s Floweree 1, se 29-21-2w, td 1405 ft. Lone Star Oil Co.'s McLean 2, se 13-21-3e, sp.

CHOTEAU—Northern State Oil Co.'s Woodward 1, sw 20-14n-24e, dr below 2400 ft. Melton Corp., 24-21n-17e, cas set 2825 ft, dr ahead. Pownam Oil Co., 24-19-11e, fsh 150 ft. Williston-Shelby O&G Co.'s Flack 1, ne 12-28-11, wso 2830 ft.

GALLATIN—Gallatin Valley Oil Co., nw 1-1n-4e, dr below 330 ft.

GLACIER—Fulton Pet. Corp.'s Blackfeet 1, ne 28-36n-12w, straight hole, td 1680 ft. B & H Oil Co.'s Haines 1, se 2-34-6w, try to test, td 2762 ft. Jeffries-Hoerr's Dawson 1, ne 7-21-12w, resum 3000 ft. Montana Utilities Co.'s Hagland 1, sw 13-34-6w, sd 20 ft.

LIBERTY—Northland O&G Co.'s Yurman 1, 32-33n-5e, dr 3610 ft. Sunburst's McLaren 1, se 8-37-6e, sd 3115 ft. C. Howard's Schoonover 1, se 18-36-6e, prep to produce, td 2247 ft.

ROSEBUD—Prairie O&G Co., 1-X, 26-10-39e, cemt whipstock at 1900 ft, td 2415 ft.

TETON—Andover Oil Co.'s Carlson 1, 5-24-4w, sd 150 ft. California Co.'s Sullivan 1, nw 34-27-7w, dr 100 ft. Earl Oil Corp.'s Gad 1, se 22-22-8w, resum 2006 ft.

TOOLE—Liquid Gold Oil Co.'s Robert 1, ne 25-36-12, dr below 2360 ft. International Royalty Hold. Co.'s Henry 1, sw 26-35-36, pull 8¼-in cas 2650 ft. A-1 Pet. Co., se 24-36-1e, sd 1555 ft. Campbell-Mont. Pet. Corp., nw 29-36-2e, validation. Oregon Oil Synd., se 20-36-2e, rig up.

YELLOWSTONE — Peter Antonioli, 21-2n-25e, wait cas 1600 ft.

KANSAS

MORTON COUNTY — Hydraulic Oil Co.'s State Land 1, nw se 22-34-43w, sd 3460 ft.

COWLEY COUNTY—Fisher et al's Hunt 1, c sw se se 11-34-3e, ru and sd.

SUMNER COUNTY—Spencer et al's Porter 1, ne sw se se 11-34-3e, rigging up. Otstot et al's Warlow 2, c se nw se, 22-33-3w, dr 1740 ft.

COWLEY COUNTY—Lehman et al's Hill 1, se ne 27-33-4e, dr 680 ft. Roth and Farrout's Reidy 1, c sw nw ne 8-32-4e, td 1040 ft.

HARPER COUNTY—Beeler et al's Bear 1, c ne 21-31-6w, td 1830 ft, sd.

FORD COUNTY—Carter et al's Community-Everett 18, c ne 22-29-21w, (6000 ft test), dr 3795 ft.

SEDGWICK COUNTY—Buck et al's McNanaman 1, c ne nw nw 2-20-1e, 10-in cas 2301 ft, hfw 2295-2370 ft, td 2440 ft.

FORD COUNTY—Swain et al's Henthorn 1, c nw 21-25-24w, 5-in cas 4645 ft, dr 5105 ft.

STAFFORD COUNTY—Rosenthal, Stanolind & Amerada's Gray 1, c ne 11-34-13w, 10-in cas 2201 ft, td, fsh bit.

RENO COUNTY — Shell & Continental's Blake 1, sw se se 23-23-4w, T. chat 3256 ft, 8-in cas 3267 ft, td 3308 ft, 8½ mil gas S. I.

MARION COUNTY—Maidwell's La Master 1, nw c 31-22-4e, td 650 ft.

COFFEY COUNTY—Hegbert et al's Kroft 1, se sw se 30-22-14e, 10-in cas 818 ft, dr 1550 ft. Roberts et al's Hay 1, sw se nw 32-22-15e, td 1250 ft, sd.

BARTON COUNTY—McCool et al's Isern 1, c sw se ne 12-20-11w, td 1600 ft, sd.

LYON COUNTY—Sheedy et al's Brown 1, c 2½ se 10-20-11e, top big L 1995 ft, show oil at 2013 ft, dr 2050 ft.

RUSH COUNTY — Dewey & Mitchell's Greenwalt 1, c sw 17-19-16w, 2490-2500 ft, hfw dr 3190 ft.

BARTON COUNTY—Skelton Oil's Ott 1, c se se 16-19-14w, 8-in cas 2107 ft, dr 2230 ft.

RICE COUNTY—Solar Oil's Zink 1, se nw 3-19-10w, (3400 sil 1 test), ru. Deitrick & Langston's Purcell 1, nw c 33-19-9w, 12-in cas 1000 ft, dr 1270 ft.

CHASE COUNTY — Kline et al's Elliston 1-A, c se se 21-19-6e, dr 583 ft.

BARTON COUNTY—Syndicate Oil's Boertz 1, c nw se ne 13-18-12w, td 2450 ft.

RICE COUNTY — Allison & Fitzwilliams' Blake 1, ne nw 9-18-10w, rig. McFadden & Shell's Jennings 1, c sw ne nw 29-18-6w, pb to sg 1130 ft, sd.

CHASE COUNTY—Borden et al's Atkinson 1, nw se 18-18-7e, rog.

NESS COUNTY—Gypsy's Coleman 1, sw ne 25-17-25w, wih, fsh liner 4690 ft, td.

ELLSWORTH COUNTY—Gilmore Oil Co. et al's Sturn 1, nw sw 31-17-9w, est 2½ mil gas 2480-85 ft, T sil, 3243 ft, set 5-in liner at 3245 ft, 3284-88 ft, hfw, td 3295 ft, plugged back to 3264 ft and will shoot.

MORRIS COUNTY—Urschell et al's Bersuch 1, c nw se nw 10-17-7e, ru and sd.

ELLSWORTH COUNTY—Alladin et al's Stoddenberg 1, c sw 22-15-10w, 12-in cas 1310 ft, dr 1725 ft.

SALINE COUNTY—Stanolind et al's Mar-

Oil men are now buying the . . .

GULF COAST

Forged Steel Louisiana Pattern Stuffing Box Casing Heads in preference to the old style Cast Steel Casing Heads . . . . . .

FORGED STEEL

STUFFING BOX

They are approximately 25% lighter in weight, thus saving in freight and labor installations . . . . . .

CASING HEADS

Made of solid forgings and all chances of leaks, occasioned by sand and gas holes sometimes encountered in cast steel are eliminated . .

COST NO MORE

than cast steel Casing Heads. They come with packing inserted before shipping . . . . ready to be installed . .

Write for Information

GULF COAST MACHINE & SUPPLY COMPANY

BEAUMONT, TEXAS P.O. BOX 999

HOUSTON, TEXAS P.O. BOX 1454

tin Community 1, ne se se 3-16-3w, 8-in cas 2835 ft, hfw 2905 ft, base L 3072 ft, 6-in cas 3075 ft, td 3080 ft, cas trouble.

MORRIS COUNTY—Hankenson et al's Cessnum 1, sw se 24-16-9e, sd 2210 ft.

FRANKLIN COUNTY—Fields et al's Usher 1, se c 35-16-17e, sd 400 ft.

RUSSELL COUNTY—Hall et al's Mills 1, se sw se 30-14-13w, 8-in cas 2890 ft, S O 2902 ft, 2902-2908, 1100 ft oil in hole 2 hrs, dr 3406 ft.

ELLSWORTH COUNTY — Milton et al's Kaster 1, se ne 6-14-9w, show gas 2500-5 ft, 8-in cas 2468 ft, dr 2755 ft. Hershey et al's Schaltz 1, c ne 9-14-8w, sd 1925 ft, sd.

OSAGE COUNTY—Riggs-Smith's Wood 1, c se nw 31-14-15e, 10-in cas 1050 ft, sd.

RUSSELL COUNTY — Austin Drlg. Co.'s Rockefeller 1, se c 6-13-12w, 3320-25 ft, hfw, td 3374 ft, sd.

SALINE COUNTY—Twin Mounds Oil Co.'s Weis 1, c w½ ne nw 30-13-4w (owd) 19-inch cas 1010 ft, sd 2710 ft.

DICKINSON COUNTY—Severs et al's Livingood 1, ne sw 13-13-2e, sd 3850 ft.

RUSSELL COUNTY—Gilbreath et al's Bratton 1, c ne 33-11-13w, 3090-99 ft, s o, sd.

GRAHAM COUNTY — Schleimeyer et al's Clark 1, c sw ne ne 11-9-25w, 6-in cas 4221 ft, td 4380 ft, ur 6-in.

CLAY COUNTY—Nebraska Oil's Tivier 1, sw c 19-8-9e, td 2700 ft, sd.

SHERIDAN COUNTY — Flo et al's Shoemaker 1, se sw sw 27-27-26w, 10-in cas 1178 ft, td 1840 ft, fsh.

ROOKS COUNTY—Empire's Holsman 1, c sw ne se 17-7-20w, hfw 3290 ft, td 3302 ft, ur 6-in.

WASHINGTON COUNTY—Sincox's Powell 1, nw se ne 16-3-3e, sd 1720 ft.

RAWLINS COUNTY—Danciger et al's Unknown 1, sw c 3-2-35w, sd 3200 ft.

ARKANSAS

Company, Well and Location	Initial Production Bbls.	Depth
MILLER COUNTY—		
Bullock Oil Co., Hervey 1, 33-14-26	*	2832
POPE COUNTY—		
Ark. La. P. L. Co., Baird 1, 11-7n-20w	*	4231

CHICOT COUNTY—W. R. Smith's Lytle 1, 31-18-3, ta 2925 ft.

CLAY COUNTY—S. C. Jeffus, Tr.'s Underwood 1, nw ne 4-20-8e, sd cur titles 1214 ft.

CLEBURNE COUNTY—Donnell et al's Fee 1, 33-11-9, sd 3740 ft.

COLUMBIA COUNTY—Kendall Oil Co.'s Fullenwider & Kitchen 1, ne ne 13-17-22, 12½-in cas 75 ft, claim oil sand 489-502 ft, sd 778 ft. Modisette et al's Sharklee 1, sw ne 33-16-19, 10-in cas 42 ft, arr set 8-in cas, hole heaved, td 960 ft.

DALLAS COUNTY—Jno. James, Tr.'s Fordyce Lbr. Co. 1, ne nw 11-9s-15w, 10-in cas 176 ft, changing from 3-in to 4-in ds, td 2520 ft. E. C. Brewer, Tr.'s Hillman 1, se ne 20-10-13, 10-in cas 138 ft, sd in rock 2846 ft.

GRANT COUNTY — Spann & McClung's Sarah Page 1, sw nw 3-3-12, ur 7-in cas at 226 ft, td in soft white sand 1024 ft.

HOT SPRINGS COUNTY—Jno. Watkins, Tr.'s Cunningham 1, ne ne 11-5-16, sd 220 ft.

JOHNSON COUNTY—Blackwell O&G Co.'s Wyver 1, 21-8-23, ta 5600 ft.

LA FAYETTE COUNTY—Crawford Drilling Co.'s Vaughan 1, 25-19-25, rig. McIver et al's Hattle 1, nw ne 1-20-26, 12½-in cas 115 ft, sd 2520 ft. Smitherman & McDonald's Bodcaw 1, se nw ne 16-15-22, 12½-in cas 42 ft, 8¼-in cas 1176 ft, 6¾-in cas 1193 ft, hfsw, td 1199 ft.

LAWRENCE COUNTY — Marguerite Dev. Co.'s Broadway 1, 31-17-1, sd 45 ft.

LINCOLN COUNTY—L. B. Cook, Tr.'s McGehee Pltg. Co. 1, ne sw 5-8s-7w, 12½-in cas 90 ft, fsh 14 joints 4-in, td 691 ft.

LITTLE RIVER COUNTY—Fay Roberts Oil Co.'s Russell 1, nw nw 25-12-29, lcn.

LOGAN COUNTY—M. W. Greesom's Parks 1, 21-8-24, sd 1309 ft. J. H. Flowers' White 1, 13-5-26, sd 3610 ft.

MILLER COUNTY—E. & F. Oil Co.'s E. L. Beck 1, 36-15-26, 6⅝-in cas 2792 ft, 4¼-in cas 2957 ft, sd 2968 ft. Bullock Oil Co.'s Hervey 1, 33-14-26, junked, abn in gummy lime with streaks red beds, td 2832 ft. East Texas O&G Co.'s Hervey 1, 2-15-26, ta 890 ft. Fitzwater et al's Beck 1, sw se 33-15-26, 10-in cas 85 ft, sd. J. D. McRae's Smith 1, nw se 28-15-26, dk. W. E. Noel et al's Dickson 1, nw ne 11-20-27, lcn.

OUACHITA COUNTY—Copenhaver et al's Elliott 1, se se 11-15-17, 6-in cas 2185 ft, tested dry, sd 2210 ft.

PIKE COUNTY—Henderson et al's Tilyou 1, 26-8-24, show heavy oil 567 ft, ta in lime rock 2920 ft. E. R. Henderson's Lee 1, sw se 31-8s-24w, 10-in cas 198 ft, dr gumbo 367 ft.

POPE COUNTY—Ark. La. P. L. Co.'s Baird 1, se nw 11-7n-20w, 10-in cas 1168 ft, 6⅝-in cas 3403 ft, dry abn in black shale, td 4231 ft.

SCOTT COUNTY — Heavener O&G Co.'s Reser 1, 36-4-26, fsh cas, td 1536 ft. Waldron O&G Co.'s J. G. White 1, sw nw 17-3n-29w, 10-in cas 225 ft, sd wo cas, td 1850 ft, (sec. hole.)

SEBASTIAN COUNTY—M. W. Greesom's Spears 1, 9-7-29w, sd after testing sw, td 2515 ft.

SEVIER COUNTY — Tri-State O&G Co.'s Bank of De Queen 1, s½ sw 34-8s-32w, dk.

UNION COUNTY—Rice et al's Whatley 1, 7-17-15, sd 2186 ft. Southern Prod. Co.'s Wingfield 1, se nw 16-19-15, 10-in cas 103 ft, arr res, td 2608 ft. Lion O. R. Co. et al's Guy F. Hayes A-9, sw ne 4-16-15, 12½-in cas 270 ft, dr shale, streaks sand 3480 ft (5000 ft test). Wilson & Chapman's Ned Parker 1, nw se 3-18-13, 10-in cas 230 ft, tested 300 ft mud and oil, show gas through 5-in ds, 3559-65 ft, top sand 3561 ft, cemtd 6⅝-in cas, td 3565 ft. Hadley 1, ne sw 3-18-13, 10-in cas 102 ft, 600 ft fluid in hole 30 per cent sw, sd 3570 ft. Atkins 1, sw ne 3-8-13, dk. H. Norman 1, se ne 3-8-13, lcn. Doty A-1, ne se 3-18-13, lcn. Doty B-1, ne se 3-18-13, lcn. Marine Oil Co.'s P. Winn A-2, nw nw 11-18-13, 10-in cas 276 ft, cored oil sand 3582-86 ft, cemtd 6⅝-in cas 3579 ft, td 3586 ft. Union Sawmill 1, se se 3-18-13, 10-in 236 ft, dr red beds 3320 ft.

WASHINGTON COUNTY—Taylor et al's Runny 1, 1-13-29, sd 1702 ft. Lincoln Lease Holding Synd.'s Townsite 1, 30-15-32, ta 1500

ALLSTEEL THROUGHOUT

CARDWELL ALLSTEEL

HYATT BEARINGS

QUALITY IS ALWAYS ECONOMY

MANUFACTURERS OF

OILFIELD WINCHES, PIPELINE WINCHES AND BACKFILLERS

Auxiliary Equipment For "Caterpillar" Tractors

ALLSTEEL PRODUCTS MFG. CO.

CABLE ADDRESS "ALLSTEEL"

PHONES L.D. 126, 4-4381 L.D. 289, 4-4382

WICHITA, KANSAS U.S.A.

DIAMOND CHAINS

NIKROME SHAFTS

ft. C. H. Willoughby's Jones 1, 34-16-30, sd 2150 ft. O'Hara & Shetterley's Boyd 1, 12-16-32, ta 650 ft. Delbert Graves' Cunningham 1, 14-15-32, sd in gray sand 602 ft.

VAN BUREN COUNTY — J. S. Martin's Scanland 1, 5-9-13, sd 50 ft.

YELL COUNTY—T. Luckett's Balcon 1, 36-7-12, sd while fsh cas td 5710 ft.

NORTH LOUISIANA

Company, Well and Location	Initial Production Bbls.	Depth
BIENVILLE PARISH—		
Jamestown Synd., Lawhon 1, 15-16-8w	•	2854
WEBSTER PARISH—		
Red Hawk Oil Co., Matthews 1, 11-23-9w	•	2797

BIENVILLE PARISH — Ark. La. P. L. Co.'s Gayoso Co., Inc. 1, nw sw 14-16-10. rig. Jamestown Synd.'s Lawhon 1, sw ne 15-16-8w, show gas in Tokio sandy shale, 6-inch 2845 ft, cas collapsed while blg junked, abn, td 2854 ft.

BOSSIER PARISH—Andrews & Davlin's Nattin 1, 15-22-14, sd 2950 ft. Rambaugh et al's Allison 1, 10-19-13, sd 1100 ft. Flint River Oil Co.'s Dalton 1, se nw 22-22-13, 12½ cas 236 ft, dr sandy shale 2530 ft. Hawkins et al's Newell 1, ne ne 12-19-11, dr 690 ft (upper Trinity test). H. I. Morgan's Kendricks A-13, nw se 22-19-11, 10inch 136 ft, blowout at 1737 ft, killed arr skid over for new hole (upper Trinity test). D. L. Perkins et al's Ardis 1, ne sw 13-15-11, rig; Glover 1, se ne 23-15-11, lcn.

CADDO PARISH—Pelican Nat. Gas Co.'s Cooper 1, 29-18-14, 15½ cas 200 ft, 12½ cas 1129 ft, dr hard lime and bldrs 2858 ft(to be 5500 ft test). United Gas Pub. Serv. Co.'s Smith 1, nw ne 33-23-16, sp cemtd 12½ cas 471 ft (to be 5500 ft test).

CATAHOULA PARISH—National Drilling Co.'s Marsh McMillian 1, 26-9-6e, 6⅝ cas 2796 ft, tested sw, sd 3097 ft.

CALDWELL PARISH—Hudson et al's Burton 1, 36-12-2e, sd in sand 2956 ft. Carter Bell et al's Taylor 1, ne se 17-14-4e, rig.

CLAIBORNE PARISH — Leue Oil Co.'s Kinder 1, sw se 2-21-7w, sp 12½ cas 152 ft, dr 235 ft.

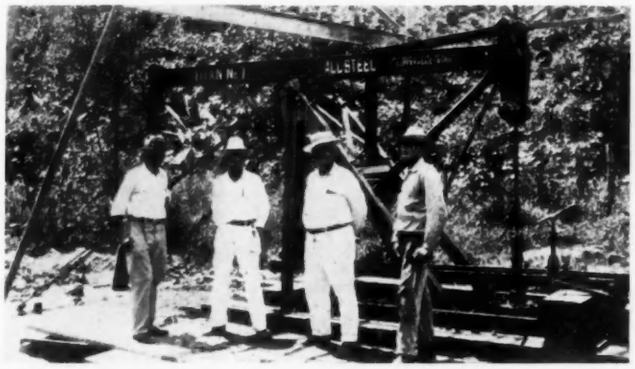
CONCORDIA PARISH—United Gas Pub. Serv. Co.'s Hughes 1, 49-8n-10e, 12½ cas 198 ft, arr make ds test 1482 ft.

DE SOTO PARISH — Rellitt O&G Co.'s Cannon Hrs. 1, nw ne 12-11-16, rig. W. H. Weichert's H. Smith 1, 31-14-15, top gas sand 1653 ft, top chalk 1901 ft, sd 2350 ft. Neff et al's Ramsey 1, 33-13-16, 12½ cas 80 ft, bit lost in hole, sd 3000 ft. E. T. Oakes' Johnson 1, 30-13-15, 10-inch 80 ft, base Midway 1378 ft, coring Arkadelphia 1395 ft.

NATCHITOCHES PARISH—C. M. Talley et al's Talley 1, 29-11-10, tested dry show oil in bro sand and shale 1256-69 ft, dry 1380 ft, sd wo. W. M. Coates et al's Collins 1, sw nw ne 28-9-10, base Midway chalk 2612 ft, base hd lime 4039 ft, tested 15 joints mud and sw 4020-91 ft, ta 4091 ft. J. W. Cooper et al's Cooper 1, 35-11-10, sd 3156 ft; Cooper 2-A, 35-11-10, top chalk 1400 ft, sd 1515 ft.

RED RIVER PARISH—Mack Jourden Co.'s Lockett 1, 32-13-10, 10-inch 90 ft, dr 672 ft.

SABINE PARISH—J. C. Walton's Sabine 1, ne nw 11-7-12, 6⅝ cas 2119 ft, sd 2376 ft. Lacey Prod. Co.'s Cooper 1, 30-8-11, top chalk 2306 ft, 6⅝ cas 2270 ft, wosr, td 2620 ft. Triangle Pet. Co.'s Sabine 2, 36-8-12, 10-inch 85 ft, r to bot, td 1950 ft. J. J. Kean's Belton 1, se sw ne 31-9-13, top marl 1590 ft, claims core showing oil, arr set 8-inch cas, td 1600 ft. Jno. Woodley's Sabine 1, ne se 12-8-12, 10-inch 103 ft, 6⅝ cas 2310 ft, top marl 2312 ft, base marl 2392 ft, arr to abn as dry hole, td in chalk 2716 ft. H. W. Perritt's Bowman-Hicks 4, se ne 2-7-12, rig; Boring 1, ne nw 11-7-12, 10-inch 85 ft, 6-inch 2238 ft, hfo wosr, td 2602 ft. A. H. Thames' Edwards Est. 1, ne se 8-8-13, 10-inch 100 ft, sd for water 1200 ft. R. L. Gay, Tr.'s, Long-Bell A-1, ne nw 10-8-13, 12½ cas 105 ft, top marl 1897 ft, base marl 1950 ft, dr bro sand 2683 ft. Jordan Drilling Co.'s La. Long Leaf 2, sw se 3-7-11, 10-inch 103 ft, cemtd 6⅝ cas 2350 ft. Gautier et al's Meshell 1, se nw 30-8-12, top marl 2224 ft, fsh slip 2260 ft. Ohio Oil Co.'s Bowman-Hicks 9, nw se 35-8-12, lcn; Bowman-Hicks 10, sw ne 35-8-12, lcn; Bowman-Hicks 11, sw



Electric, Gas Engine and Power-Driven Jacks.

Pumping Oil on the Isthmus of Tehuantepec

● You will find JENSEN JACKS serving faithfully in the world's most isolated oil fields. Their great dependability, and the apparent impossibility of wearing them out make them prime favorites in other lands as well as here at home.

The pictures here were taken on the Isthmus of Tehuantepec. The Jensen Jack in the flood waters goes right on about its business during the five or six weeks out of every year when this condition prevails.

JENSEN JACKS

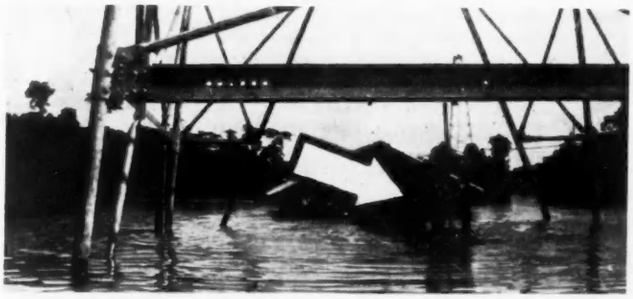
• JENSEN BROTHERS MFG. CO. . . . Coffeyville, Kansas •

Jensen Brothers Mfg. Co., Buffalo Warehouse, Houston, Texas

Dunigan Tool & Supply Co., Breckenridge, Texas

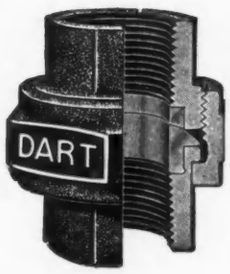
Export Office: 136 Liberty St., New York City

Petroleum Equipment Co., 2800 South Alameda St., Los Angeles, California



BRONZE TO BRONZE

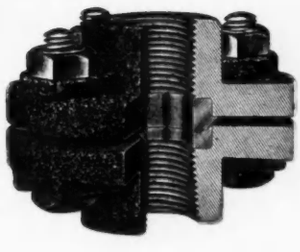
Is the Reason



DART UNIONS

Give Service
Try them

E. M. Dart Mfg. Company
PROVIDENCE, R. I.
The Fairbanks Company
Distributors



McCollum Exploration Co.

Contracts taken for Seismograph Work

Foreign Representatives:
Drilling and Exploration Co., Inc.
25 Broadway, New York
Maracaibo, Venezuela
1211 ESPERSON BLDG.,
HOUSTON, TEXAS

PATENTS
Patents Obtained and Trade Marks and Copyrights Registered
HARDWAY & CATHEY
428-29-30 Bankers Mortgage Bldg.
Phone Fairfax 8232 Houston, Texas

HIRSCH, BROWN AND SUSMAN
attorneys at Law
32nd Floor Gulf Building
Houston, Texas
Specializing in Oil Law and Land Law

PATENTS
JESSE R. STONE
and **LESTER B. CLARK**
Patents, Infringement Litigation, Trade Marks
Associated with
Andrews Streetman Logue & Mobley
2200 Gulf Bldg. Houston, Texas
Preston 3949

HEYDRICK'S NEW MAPS
WEST TEXAS
County Maps — Combination Maps
Descriptions and prices on application
Heydrick Mapping Co.
WICHITA FALLS, TEXAS

General Land Office Maps of all Texas Counties
MAP MOUNTING
PHOTOSTATS
Map Reproduction from White or Blue Prints
TEXAS BLUE PRINT & SUPPLY CO.
1013 Capitol Ave.
HOUSTON, TEXAS

PHOTOGRAPHS
Trained men ready to photograph your equipment whether in your shops or working in the field.
"28 Years Making Industrial Photos"
LITTERST COMMERCIAL PHOTO COMPANY
2007 Polk Ave. Phone Preston 0703
HOUSTON, TEXAS

se 2-7-12, lcn. Durham Oil Co.'s Polly 1, sw ne 18-8-12, 10-inch 105 ft, 8¼ cas 2087 ft, base chalk 2595 ft, sd 2722 ft. Sabine Royalties Co., Inc.'s Bill Hill 1, nw ne ne 5-7-11, 10-in 105 ft, top marl 2217 ft, 6-inch 2230 ft, 1900 ft oil in hole, wosr td 2506 ft; Bill Hill 2, sw se se 5-7-11, dk; Skinner 1, se sw ne 5-8-11, 6⅝ cas cemtd 2272 ft. Diffie & Barrett's Lites 1, 34-8-11, 10-inch 105 ft, sd. Hawkins et al's Moran 1, se ne 1-7-11, 10-in 100 ft; 6-in 2428 ft, 400 ft oil in hole, wosr, td 2620 ft. Hawkins & Anton's Newton 1, 1-7-11, sp dr 50 ft. Lyons & Neely's Byrd 2, 1-7-11, sp 10-in 100 ft, dr 600 ft. Texas Co.'s DeLatin 1, nw se 3-7-11, rig. W. M. Coates' R. L. Gay 2, 1-7-12, cemtd 6-in cas 2186 ft, td 2197 ft; McNeely 1, 14-7-11, rig; Williams 1, 23-7-11, rig. Pelican Nat. Gas Co.'s La. Long Leaf 9, sw se 3-7-11, 10-inch 85 ft, 6-inch 2363 ft, dr 2595 ft. Stovall Drilling Co.'s Nulton 1, 1-7-13, 10-inch 100 ft, dr 1320 ft. Sabine Prod. Co.'s Pearce 2, se nw 10-7-11, 10-inch 100 ft, dr 1350 ft. Eddie Self's Jacobs 1, sw se 1-7-11, 10-inch 105 ft, dr 1000 ft. L. K. McGuffin's Bush 1, nw sw 1-7-11, lcn. Geo. Pipes, Tr.'s, Byrd 1, sw nw 1-7-11, sp 10-inch 95 ft, dr 450 ft. Zeke Lohman's McCormick 1, ne sw 2-7-11, dk. A. F. Tarver's Cutrer 1, nw nw 12-7-11, rig.

TENSAS PARISH—A. R. Willis' Curry 1, 39-11-12, fsh ds 3475 ft.

WEBSTER PARISH—D. M. Coyle's Frazier 1, ne se 27-23-11, dk. Cassidy & Davis' Nickerson 1, ne sw 29-23-10, sd 160 ft. Red Hawk Oil Co.'s Matthews 1, se nw 11-23-9w, top chalk 2480 ft, 6-inch 2764 ft, bro formation showing oil 2782-97 ft, bailed down 2400 ft, small show oil, cas collapsed, junked abn, td 2797 ft.

WEST CARROLL PARISH — United Gas Pub. Serv. Co.'s Pioneer Cooperage 1, 29-21-8e, 15½ cas 167 ft, 10-inch cas 867 ft, dr shale 2280 ft.

MISSISSIPPI

Company, Well and Location	Initial Production Bbls.	Depth
GRENADA COUNTY—		
Carter Oil Co. et al, Dubard 2, 18-22-4e	*	3023
WARREN COUNTY—		
Dixie Pet. Co., Pat Henry 1, 36-17n-4e	*	2297

CLAY COUNTY—Ohio Oil Co.'s Cantrell 1, ne ne 16-15-5e, elev 270 ft 13⅜ cas 1389 ft, 9⅝ cas 2929 ft, dr 3775 ft.

CHICKASAW COUNTY — Hightower & Golsan's Fleming 1, 20-13s-3e, sd wo 6-inch cas, td 1505 ft.

COVINGTON COUNTY (Collins Dist.)—Gulf Ref. Co.'s Pope 1, 35-8n-16w, rig up to deepen to 4500 ft, td in Wilcox 3000 ft.

GRENADA COUNTY—Carter Oil Co. et al's Dubard 2, se nw 18-22-4e, elev 167 ft, 12½ cas 786 ft. Tuscaloosa-Eutaw contact 3007 ft, dry abn in Tuscalloosa shale strks red gumbo, td 3023 ft.

JASPER COUNTY (Bay Springs Dist.)—Bay Springs Pet., Inc.'s, J. H. Keyes 1, nw ne 21-2n-10e, 15½ cas 104 ft, top Cane River 1090 ft, dr Cane River 1521 ft.

MONROE COUNTY (Amory Dist.)—Amory Dev. Co.'s Bourland 1, sw ne 2-15-19, sd in brown sand 3007 ft. P. J. McAlpine's Cowart 1, ne sw 2-12-19, 10-inch 694 ft, 8¼ cas 1276 ft, setting 6⅝ cas to shut off sw, td in pinkish white chalk 2197 ft. Associated Royalties' School Board 1, sw se 16-15-17, sd 60 ft.

NOXUBEE COUNTY (Macon Dist.)—Geo. R. Thompson, Tr.'s, Donahue 1, 25-16n-17e, elev 280 ft, dk. pat.

RANKIN COUNTY (Jackson Dist.)Love et al's Muse 1, se se 32-7-4e, 12½ cas 600 ft, top black shale 3740 ft, dr black shale 3900 ft; Moore 1, se nw 28-6-2e, ta 900 ft. Atkinson et al's Valentour 1, nw nw 18-5-2e, rig.

SCOTT COUNTY—Culley et al's Owen 1, se ne 2-8n-9e, dk.

WARREN COUNTY (Vicksburg Dist.)—Eagle Lake O&G Co.'s Kiger 1, sw se 9-18n-2e, dr 90 ft. Dixie Pet. Co.'s Pat Henry 1, se ne 36-17n-4e, 12½ cas 120 ft, dry abn in sandy shale, td 2297 ft. Vicksburg O&G Co.'s Dornbusch 1, sw ne 8-18n-5e, ta 1600 ft.

WINSTON COUNTY (Louisville Dist.)—Miss. Drilling Co.'s Scarbrough 1, nw nw 15-13n-14e, base red beds 2739 ft, cored sand 3117-23 ft.

YALABOUSHA COUNTY (Water Valley Dist.)—J. D. Collett et al's Blackmer 2, sw nw 14-11s-4w, 12½ cas 103 ft, 8⅝ cas 2428 ft, dr hard formation 2977 ft.

ALABAMA

MADISON COUNTY — Tennessee Valley O&G Co.'s Fee 4, 1-4s-2e, no report.

SUMTER COUNTY (Livingston Dist.)—Forked Lightning O&G Co.'s Nixon 1, sw ne 30-20-2w, dk.

WASHINGTON COUNTY—Hobson et al's Wilson 1, 27-7-1w, 10-inch 130 ft, driving 8-in pipe below 920 ft; Hobson Bros. 1, 9-8-2w, ta 1450 ft. Oscar Brown's U. S. Land & Cotton 2, 25-3-2w, sd 700 ft.

TENNESSEE

DECATUR COUNTY—Chester County O&G Co.'s Montgomery 1, dr gray lime and shale with slight show oil 2250 ft.

Play Safe use Parmaco Plug Packers

▼

Look for the Orange and Black Label

The Parkersburg Machine Co.
PARKERSBURG, W. VA.

PARKERSBURG MACHINE CO. PARMACO PARKERSBURG, W. VA. U.S.A.

The House of Courteous Service

William M. Barret, Inc.
Consulting Geophysicists
Specializing in Magnetic Surveys
CURTIS BUILDING, LONGVIEW, TEX.
GIDDENS-LANE BUILDING, SHREVEPORT, LA.

THE FORT WORTH LABORATORIES
Field Gas Testing. Analysis of oil field brines, gas minerals and oil.
Sell Thermometers, Hydrometers and Laboratory Glassware.
F. B. Porter, B. S., Ch. E., Pres.
R. H. Fash, B. S., Vice-President
828½ Monroe St., Ft. Worth, Tex.

OKLAHOMA

ALFALFA COUNTY—T 27n, R 11w, Sec. 12, Smith Bros., Forbes 1, ne c se nw nw, sd 1420 ft.

KAY COUNTY—T 27n, R 2e, Sec. 9, Mummer et al, Sornick 1, nw c se, hfw 2070-2170 ft, sd 2700 ft. T 26n, R 1w, Sec. 32, Boucher et al, Jefferson 1, ne c sw, sd 3502 ft.

HARPER COUNTY—T 25n, R 20w, Sec. 12, Empire, Bruce 1, sw c ne ne sw, sd 7936 ft.

GRANT COUNTY—T 25n, R 4w, Sec. 22, Cowden, Collmer 2, ne c se ne sw, sd 5640 ft, tools lost.

ALFALFA COUNTY—T 24n, R 11w, Sec. 14, J. V. Bailey et al, Acre 1, c sw ne, show gas 5298-5303 ft, sd 5330 ft.

GARFIELD COUNTY—T 24n, R 6w, Sec. 9, Pulse & Beamer, White 1, se c nw, sd 5850 ft.

NOBLE COUNTY—T 21n, R 1e, Sec. 12, Barnsdall et al, Miksch 1, nw c sw, sd 4926 ft.

BLAINE COUNTY—T 19n, R 10w, Sec. 13, Washoma Pet. Co., Phillips 1, c nw sw, sd 4600 ft.

LOGAN COUNTY—T 18n, R 3w, Sec. 33, Healey et al, Quier 1, se c sw, sd 3970 ft.

KAY COUNTY—T 28n, R 3e, Sec. 24, Summitt Drlg. Co., Hays 1, nw ne nw, show oil 2185-3208 ft, sd 3250 ft.

PAWNEE COUNTY—T 23n, R 5e, Sec. 15, Cochran et al, McFadden 1, ne c sw, rig. T 22n, R 5e, Sec. 2, Sherry et al, Milsap 1, se c sw, sd 1750 ft. T 20n, R 5e, Sec. 6, W. A. Rookstool, Berry 1, nw ne sw, sd 1951 ft, show gas.

LINCOLN COUNTY—T 13n, R 6e, Sec. 8, Atlantic et al, Beebe 1, sw ne sw, lcn. T 13n, R 6e, Sec. 9, Mid-Continent et al, Lillie 1, ne c se, r.u.s.t. 4055 ft.

OKFUSKEE COUNTY—T 12n, R 10e, Sec. 3, Shepperd et al, Shepperd 1, se nw sw, sd 3690 ft. T 11n, R 10e, Sec. 4, M. H. Watts, Champlin 1, sw c, lcn abn.

PITTSBURG COUNTY—T 9n, R 16e, Sec. 32, Pattison et al, McDuff 1, sw nw se, show gas 5654-64 ft, dr 5702 ft. T 8n, R 14e, Sec. 14, C. O. Cannady, Smith 1, sw c ne nw nw, rig and tools. T 7n, R 14e, Sec. 5, C. O. Cannady et al, Travis 1, c sw ne, rig.

LATIMER COUNTY—T 6n, R 19e, Sec. 16, P. English et al, Weaver 1, c nw se, sd 1542 ft.

OKLAHOMA COUNTY—T 12n, R 4w, Sec. 17, C. F. Cuniff, Trustee, St. Joseph 1, sw c ne sw se, sd 6700 ft.

SEMINOLE COUNTY—T 10n, R 6e, Sec. 19, Bunte et al, Bruner 1, se c nw, rig.

POTTAWATOMIE COUNTY—T 8n, R 3e, Sec. 21, Droppleman et al, Jones 1, se c nw, cored show oil 4675 ft, cemtg csg. T 6n, R 4e, Sec. 6, Magnolia, Harris 1, nw c sw, Wilcox 4455-63 ft, cored show oil and water, dry and abn.

SEMINOLE COUNTY—T 6n, R 7e, Sec. 15, Magnolia, Powell 1, nw sw se, dr 4363 ft.

ROGER MILLS COUNTY—T 12n, R 24w, Sec. 23, Ute Oil Co., et al, Williams 1, c sw, sd 4830 ft. T 11n, R 26w, Sec. 4, J. J. Rook and Palmer, Davis 1, c nw ne, (owd), dr 2960 ft.

CANADIAN COUNTY—T 10n, R 6w, Sec. 1, J. V. Bailey, Robinson 1, c ne nw, sd 150 ft.

WASHITA COUNTY—T 8n, R 19w, Sec. 29, Snodgrass et al, Blocker 1, nw c, dr 1875 ft. T 8n, R 18 west, Sec. 21, Burns & Prince, Dock 1, sw c, sd 1050 ft.

GREER COUNTY—T 7n, R 22w, Sec. 1, Good & Dowell, Cliffel 1, nw c, sand 1462-1500 ft, sd 1745 ft. T 7n, R 21w, Sec. 23, H. A. French, Murphy 1, sw nw se, sd 1654 ft.

STEPHENS COUNTY—T 1n, R 8w, Sec. 25, Rose Southard, McKinney 1, ne c, sd 1063 ft.

HUGHES COUNTY—T 5n, R 11e, Sec. 15, J. J. Wright, Roberts 1, se c sw 2M gas 915-18 ft, sd 1645 ft.

GARVIN COUNTY—T 2n, R 2w, Sec. 24, Malernee, Phillips 1, ne c sw, dr 2785 ft.

COAL COUNTY — T 2n, R 8e, Sec. 10, Whitney et al, Miller 1, se c ne (owd), sd 760 ft. T 1n, R 8e, Sec. 35, W. E. McCraw, Stiring 1, ne c se, dr 1155 ft.

ATOKA COUNTY—T 3s, R 10e, Sec. 18, Brookshire et al, Guinn 1, nw c, show gas 360-72 ft, sd 500 ft.

BRYAN COUNTY—T 7s, R 10e, Sec. 8, Bryan Oil Co., Childs 1, ne se sw, sd 660 ft.

...*"for once and all, let's get this*

HOUSING PROBLEM *definitely settled!"*

What's the use of casting around, getting estimates here, trying this product, experimenting with another, when all you need do to completely settle all housing problems is to communicate with the Houston Ready-Cut House Co.

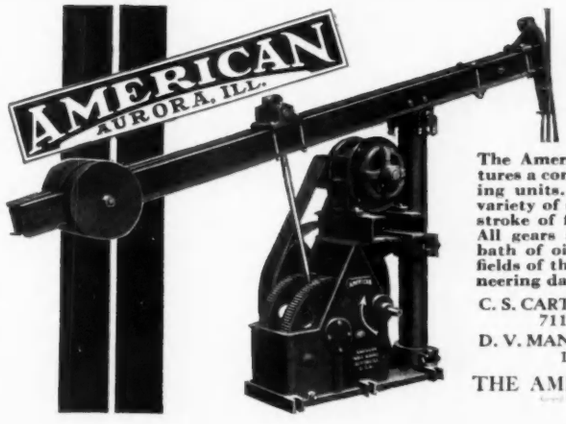
Here you have an organization, who through years of specialization in this type of structure has full knowledge of your requirements. Bunk Houses, Mess Halls, Warehouses, homes, offices, meter houses, tool houses . . . we have them all, ready to ship on a moment's notice. It is possible that our catalog of more than 1000 plans does not contain the type of structure you want. Send us your plans and specifications. We will build from them.

Take your housing problems out of the experimental stage. Concentrate on Houston Ready-Cut House Co. sectional and ready-cut buildings.

HOUSTON READY-CUT HOUSE CO.

Successors to CRAIN READY-CUT HOUSE CO.

HOUSTON, TEXAS



The American Well Works manufactures a complete line of oil well pumping units. They are made in a wide variety of sizes permitting a length of stroke of from twelve to fifty inches. All gears are enclosed and run in a bath of oil. Used throughout the oil fields of the world. Catalogs and engineering data upon request.

C. S. CARTER, *Sales Representative*
711 Thompson Bldg., Tulsa, Okla.

D. V. MANN, *Sales Representative*
1311 Kirby Bldg., Dallas, Texas

THE AMERICAN WELL WORKS
AURORA, ILLINOIS

Texas Quarterly Production Report
First Quarter, 1931

Ten Leading Producing Companies of Texas, First Quarter, 1931

Company—	First Quarter 1931	Fourth Quarter 1930	Third Quarter 1930	Second Quarter 1930	First Quarter 1930	Fourth Quarter 1929
Humble Oil & Refining Company	6,473,850	6,437,292	7,519,384	7,622,276	7,359,231	7,647,340
Gulf Production Company	5,698,388	6,767,930	7,377,163	7,345,267	6,852,880	7,384,799
Mid-Kansas Oil & Gas Company	3,948,907	4,341,411	3,218,001	4,851,448	2,831,354	.....
Shell Petroleum Corporation	3,545,257	3,661,708	4,019,486	4,166,995	2,137,007	2,501,841
The Texas Company	2,974,574	3,771,601	4,433,591	4,361,235	4,304,651	4,883,816
Pure Oil Company	2,208,259	2,655,560	2,260,006	2,000,960	1,191,645	.....
Magnolia Petroleum Company	2,188,931	2,508,679	2,843,473	3,137,380	2,851,905	2,340,306
Continental Oil Company	1,649,921	1,943,980	2,180,484	1,922,285	.....	.....
Sun Oil Company	1,574,591	1,782,715	1,797,545	.....	.....	.....
Southern Crude Oil Purchasing Co.	1,482,128	1,776,679	2,166,306	2,450,790	2,842,112	3,178,536

Total of ten leading producing companies in Texas for first Quarter, 1931 ..... 31,744,806 Barrels
Evaluation of same $22,495,276
Total production of all Texas producing companies for same period ..... 65,900,058 Barrels
Evaluation of same $46,970,638

GROSS RECEIPTS REPORTED FROM CRUDE OIL PRODUCTION FOR THE QUARTER ENDING MARCH 31, 1931

Name—Address	Barrels	Value
Abercrombie, C. L. (12-1-1930 to 3-31-31) Archer City	227	185
Adams, Harry Company & Walter Henshaw, 12-31-30) . Midland	12,978	11,752
Amicable Life Insurance Co. Waco	380	311
Arab Gasoline Corp., Eastland	1,018	951
Acorn Oil Company, Beaumont	6,383	4,663
Arrowhead Oil Co., Dallas	1,098	954
Alamo Oil Co., Brownwood	393	326
Ada Belle Oil Co., Batson	15,892	11,121
Allday Oil Corp., Wichita Falls	390	218
Arkansas Fuel Oil Co., Shreveport, La.	545,944	257,951
Apple-Brandeberry Oil Co., Wichita Falls	8,319	7,605
Andrews, W. R., et al, Breckenridge	571	498
A & P Production Co., Houston	46,814	36,186
Allied Oil & Gas Co., Laredo	78,916	55,218
Art & Taxman, Wichita Falls	425	315
Allbritain, F. J., Markley	1,025	595
Akin & Raysor, Wichita Falls	4,109	2,607
Abercrombie, J. S., Co., Houston	140,901	113,112
Ama-Gray Oil Co., Amarillo	21,029	12,386
Ames, E. W., et al, Marshall	441	411
Alaska Petroleum Co., Amarillo	125	73
Alworth-Stevens-Hild Co., New York, N. Y.	1,091	764
Adams, Harry, Co., Midland	10,933	8,110
Adamson, Peter, Jr., Tulsa, Okla.	356	295
American Maracaibo Co., New York, N. Y.	59,138	28,499
Anchor Oil Producing Co., Dallas	408	361
Andrews Petroleum Corp., New York, N. Y.	3,118	2,227
American Refining Properties, Wichita Falls	29,540	18,106
Arco Oil Co., Wichita Falls	19,559	12,030
Argus Oil Co., Inc., Austin	167	116
Atlas Production Co., Burkburnett	1,577	1,030
Adams, Dr. Walter B., Wichita Falls	326	228
Anderson-Drewery Corp., Cisco	3,168	2,723
All-American Oil & Gas Co., Oklahoma City, Okla.	1,506	1,147
Adams & Prince, Amarillo	12,009	7,663
Adams & McGahey, Amarillo	19,756	11,829
Atkinson & Sandefer Oil Corp., Breckenridge	7,388	7,036
Alamosa Oil Co., Amarillo	3,318	1,301
American Refining Properties (RMW), Wichita Falls	1,654	1,094
American Refining Properties (NBC), Wichita Falls	918	582
American Refining Properties (WMP), Wichita Falls	5,793	3,817
Ailes, J. W., Wichita Falls	713	413
Atlantic Oil Producing Co., Dallas	480,130	305,731
Artex Oil Co., Wichita Falls	948	628
Arco Oil & Gas Co., Baltimore, Md.	6,764	5,821
Amerada Petroleum Corp., Tulsa, Okla.	217,463	127,188
Arcadia Refining Co., Coleman	32,817	24,003
Amarillo Oil Co., Amarillo	1,197	658
Anderson-Pritchard Oil Corp., Oklahoma City, Okla.	70	49
Abraham, Earl, Bridgetown	872	545
Adams & Lyles, Lockhart	5,006	4,255
Adams & Lyles, Lockhart	1,393	1,101
Bayless, A. A., Fort Worth	721	655
Brown, Mrs. Carrie L., et al, Orange	4,653	3,722
Brown, Dr. E. W., Estate, Orange	3,622	2,897
Bourbon Royalty Co., Dallas	1,242	994
Bourbon Royalty Co., Dallas	3,573	2,631
Bartlett Production Co., Dockdale	449	376
Brownlee-Pope Oil Co., Austin	2,073	1,785
Brown, A. J. (12-31-30), Fort Worth	989	1,102
Bullington, O. L., (12-31-30), Wichita Falls	350	364
Boddy-Bevering Oil Corp., Henrietta	624	604
Butler & McAlister, Olney	261	271
Biggs Oil & Gas Co., McKinney	772	613
Barnes, J. B., Electra	7,186	4,984
Bohner, C. F., Kansas City, Kans.	145	101
Blue Bonnet Petroleum Corp., Somerset	633	393
Bowman Oil Co., Rockdale	396	329
Bryson Oil & Gas Co., San Angelo	3,327	3,197
Britton, Ed S., Tr., Strawn	513	457
Britton & Gordon, Strawn	647	606
Burton McKee Oil Corp., Strawn	395	344
Braden Co., an express trust, Tulsa, Okla.	3,074	2,735
Borealis Oil Co., Oklahoma City, Okla.	3,055	2,771
Baker, James Blair & C. F. Camp, Tr., W. T. Waggoner "B" Lease (12-31-30), Wichita Falls	15,994	15,036
Baker, James Blair, Jr., & C. F. Camp, Trs., "C" Lease (12-31-30), Wichita Falls	2,320	2,129
Baker, James Blair, Jr., "F" Lease (12-31-30) Wichita Falls	4,146	3,710
Baker, James Blair, Jr., & W. B. Omohundro, (12-31-30), Wichita Falls	860	645
Baird Oil Co. (12-31-30), Putnam	64	64
Burk Burnett, Jr., Oil Co. (3rd & 4th qtrs 1930), Fort Worth	379	411
Bashara & Bashara (1-1- to 6-30-30 inc.), Waco	214	235
Big Lake Oil Co. (12-31-30), Pittsburgh, Pa.	1,433,929	1,521,091
Bearman, J. A., et al, Cisco	8,119	10,043
Burns, L. T., Wichita Falls	44,498	35,597
Booth, C. H., Tr., & A. F. Priesmeyer, Tr., M. V. Lawrence "B" (12-31-30), Taylor	3,616	2,350
Booth, C. H., Tr., & A. F. Priesmeyer, Tr., M. V. Lawrence "B" (12-31-30), Taylor	3,261	2,119
Bluebonnet Oil Co., Wichita Falls	453	329
Beame, Drew, Okmulgee, Okla.	2,531	2,260
Baker, Mollie B. & Fred R., Breckenridge	461	438
Baker, J. F. & H. E., Breckenridge	2,006	1,734
Baker, J. A. & Mollie B., Breckenridge	6,174	4,517
Barbara Oil Co., Chicago, Ill.	1,334	1,230
Bartlett, Wm., & Co., Gerald L. Coffey, Receiver, Electra	496	406
Brown, H. L., Fort Worth	16,149	12,013
Baldwin, F. C., et al, Inc., Fort Worth	1,223	919
Buchanan, A. A., San Antonio	34,453	35,520
Bass & Dillard, Wichita Falls	2,026	1,418
Boller, C. W., Wichita Falls	12,584	10,042
Bonner, The Co., Wichita Falls	14,456	10,796
Bohner, C. J., Oil Corp., Burkburnett	15,189	11,098
Bohner, Crenshaw & Whitehill, Burkburnett	7,321	5,855
Bohner, C. J., et al, Burkburnett	5,291	3,855
Bynum & Palmer, Rockdale	137	113
Big Lake Oil Co., Pittsburgh, Pa.	1,461,261	1,122,666
Boardman & Ulrich, Corsicana	1,582	996
Bynum, W. W., Estate, Rockdale	742	627
Bashara, M. J. & Sons, Wichita Falls	899	579
Badger Oil Co., Amarillo	6,759	4,379
Byrd, W. E., Daisetta	478	361
Bruce, A. D., Brownwood	249	197
Baker, J. A., Breckenridge	1,033	915
Bailey & Gilliland & Mrs. Fannie Bailey, Wichita Falls	1,133	869
Big State Oil Corp., Houston	927	781
Butler & McAllister, Olney	262	188
Bridwell Oil Co., Wichita Falls	73,675	53,435
Bridwell & Heydrick, Tr., Wichita Falls	1,530	1,070

Name—Address	Barrels	Value
Bridwell & Mayfield, Wichita Falls	3,287	2,622
Beggs, Geo.-Strip, Fort Worth	818	848
Bailey, Carl B., Wichita Falls	6,898	5,571
Brown Farm Oil Co., Wichita Falls	1,430	1,105
Bolin, D. H., Tr., Graham	8,692	6,084
Barnsdall Oil Co., Tulsa, Okla.	56,861	41,155
Brady Bros., Minerva	544	442
Brazos River Gas Co., Wichita Falls	201	195
Baker & Pardue, Breckenridge	6,144	5,573
Benedum-Trees Oil Co., Pittsburgh, Pa.	4,549	3,163
Burns, L. T., Wichita Falls	832	560
Brown & Lickey, Wichita Falls	631	446
Black Cat Oil Co., Tyler	860	639
Bell Oil & Gas Co., Tulsa, Okla.	5,945	3,588
Bristow, J. E., et al, San Angelo	675	513
Brown & Guinn, Wichita Falls	244	180
Barnum Oil Co., Borger	1,141	636
Barnum Oil Co. (9-30-30), Borger	777	641
Barnum Oil Co. (12-31-30), Borger	729	497
Black, W. A., Midland	902	657
Bowers Oil Co., Vernon	758	591
Burkburnett Production Oil Trust, Baltimore, Md.	897	671
Big Indian Oil & Development Co., Gainesville	760	813
Bernice Oil Co., Saratoga	7,132	4,101
Brazelton Brothers & Williams, Graham	1,151	792
Birdwell, W. H., Rockdale	6,481	4,038
British American Oil Producing Co., Tulsa, Okla.	72,164	52,065
Big Gray Oil & Gas Co., Amarillo	8,211	5,683
Bexata Oil Co., San Antonio	956	631
Brannon & Murray, Cisco	357	278
Clark, A. R., Kansas City, Mo.	228	208
Crosbie, J. E., Inc., Tulsa, Okla.	537	247
Champlin Refining Co., Enid, Okla.	107,550	65,322
Campbell, R. S., Humble	966	744
Canary, S. C., et al, Tulsa, Okla.	350	314
Connell-Wixson-Frazier, El Dorado, Kans.	658	415
Clark, C. W., Wichita Falls	5,667	3,638
Consolidated Oil Co. of Texas, Wichita Falls	84,520	59,727
Cohen, Aaron, Baltimore, Md.	5,381	4,897
Cranfill-Reynolds Co., Houston	425,197	324,958
Coppock & Coleman, Iowa Park	10,636	8,660
Cezeaux, P. C., Humble	5,836	4,880
Cranfill Brothers Oil Co., Wichita Falls	4,177	3,342
Cole, W. C., Wichita Falls	1,139	827
Curtis, Jas. A., Wichita Falls	1,252	845
Cooper, G. W., et al, Wichita Falls	1,209	868
Cooper & Mishler, Wichita Falls	1,963	1,389
Carey, C. W., Wichita Falls	6,665	4,512
Cole Petroleum Co., Laredo	11,161	7,701
C. P. Oil Co., Henderson	32,465	10,650
Chapman, E. L., Fort Worth	173,079	106,378
Collie, Ben F., (2-1-29 to 12-31-30, inc.) Breckenridge	7,885	10,421
Caudle, Fifer (1-1-30 to 12-31-30, inc.) Rockdale	1,141	1,188
Connell-Wixson-Frazier (12-31-30), El Dorado, Kans.	941	857
Camp Oil & Gas Co., Wichita Falls	504	403
Condor Petroleum Co., Abilene	3,800	2,701
Cardinal Oil Co., San Angelo	81,037	35,806
Carey, E. S., et al, Wichita Falls	56	25
Carey, E. S., et al, Wichita Falls	326	263
Culbertson Co., Wichita Falls	7,419	5,323
Callihan, Geo. & Carter Dev. Co., Fort Worth	1,096	914
Callihan, Geo. & Carter Dev. Co., Fort Worth	367	299
Claggett & Evans, Mirando City	746	671
Cox, Edwin B., Ardmore, Okla.	1,358	1,135
Castlebury, S. A., Vernon	207	191
Cooper Petroleum Co., Houston	2,110	1,371
Cushing Refining & Gasoline Co., Cushing, Okla.	9,518	5,167
Cable Oil Co., Wichita Falls,	7,723	4,321
Coffield & Hale Oil Co., Rockdale	1,089	1,074
Crown Oil & Refining Co., Houston	12,902	10,321
Crown Central Petroleum Corp., Houston	38,510	26,913
Central Oil Co., Cameron	2,486	2,005
Clarkson, William, Jr., Houston	4,703	4,192
Cosden, J. S., Inc., Fort Worth	5,447	3,579
Canyon Oil & Gas Co., Inc., Cross Plains	205	169
Clem Oil Co., Houston	346	162
Crabb & McNeel, San Angelo	585	536
Cullen, H. R., et al, Houston	5,512	4,023
Continental Oil Co., Ponca City, Okla.	1,649,921	1,071,014
Cullen & West Production Co., Houston	20,758	21,560
Clay, J. D., Houston	3,059	2,377
Cullum, F. P., Wichita Falls	13,579	8,937
Clark, R. R., et al, Wichita Falls	31,725	25,286
Clark, R. R., Wichita Falls	10,540	8,613
Capitol Oil Co., Orange	448	317
Cashdollar & Snyder, Brownwood	166	141
Cuno, Mrs. Bertha, Moran	1,490	1,303
Collins, J. L. & Co., Corsicana	27,911	17,242
Conway Bros., Ranger	3,706	3,587
Chenault, W. L., Amarillo	439	281
Corzelius Bros. & Taggart, Eastland	912	861
Church & Weekley, Fort Worth	33,165	18,743
California, The Co., Dallas	1,423,929	848,351
Coline Oil Corp., Oklahoma City, Okla.	1,824	1,697
Corbett, J. Q. & R. V. Tidwell, Graham	460	365
Clear Lake Oil Co., Rockdale	601	498
City National Bank, Wichita Falls	927	651
Collie, Ben F., Breckenridge	733	639
Caruthers Co., San Antonio	1,248	775
Comet Petroleum Co., Fort Worth	2,822	1,606
Campbell, Alma, Fort Worth	345	305
Craig & Lowrie, Pittsburgh, Pa.	1,032	526
Christie Bros., Wichita Falls	10,847	9,571
Clayton Key Oil & Gas Co., Amarillo	2,613	1,912
Conner Son & Cloughley, Gotebo, Okla.	8,530	7,896
C. R. & M. Drilling Co., San Antonio	34,536	37,193
Cornhusker Oil Co., Lincoln, Neb.	1,566	1,080
Corvette Oil Corp., Fort Worth	10,743	5,590
Culbertson Bros. Co., Fort Worth	4,523	1,130
Cisco Oil Co., Tulsa, Okla.	16,274	12,844
Cotton, J. H., Wichita Falls	697	534
Campbell, J. M., San Antonio	9,472	6,199

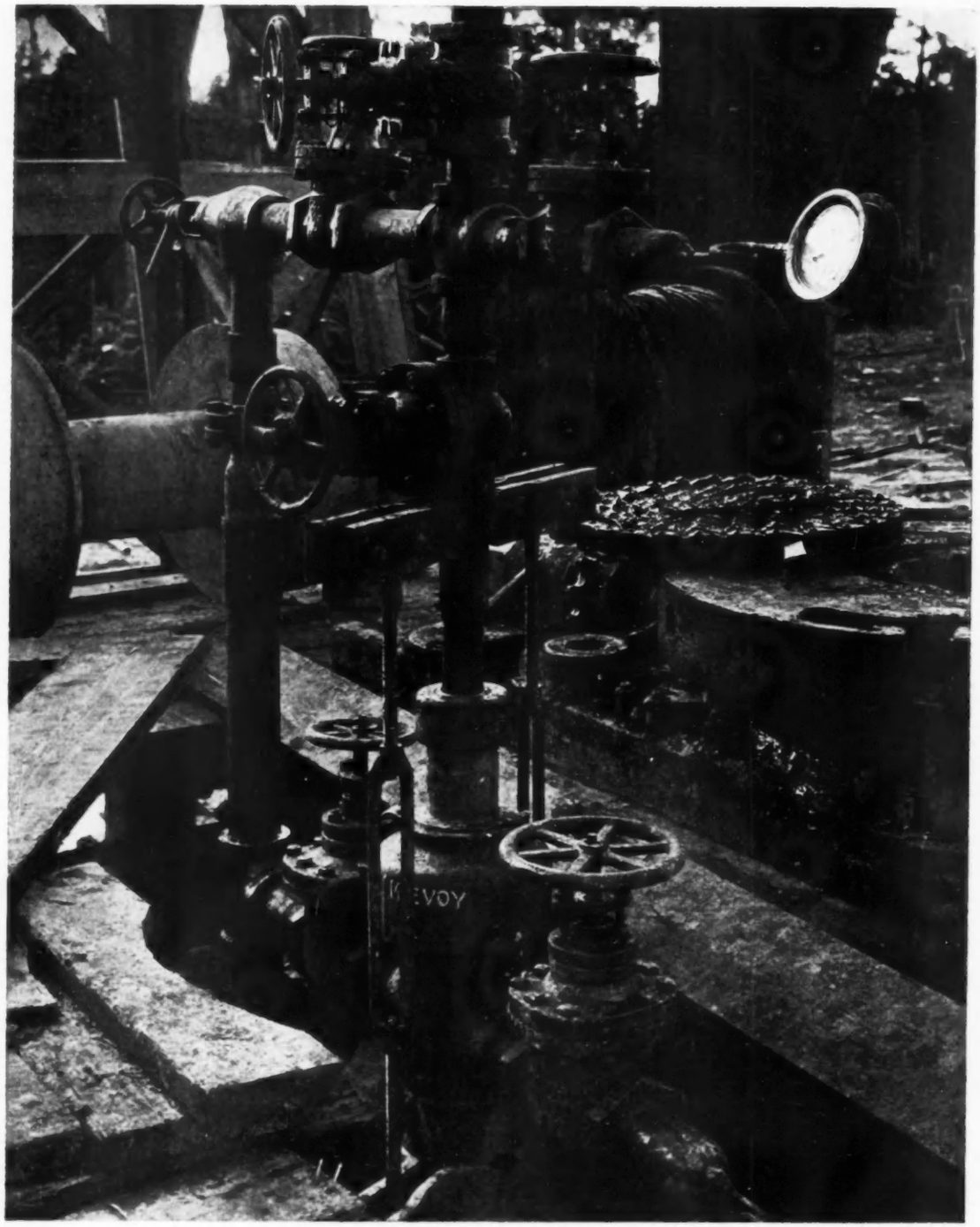
Name—Address	Barrels	Value
Dorris & Kurtz (12-31-30), Wichita Falls	2,043	2,588
Dixon Creek Oil & Refining Co., Amarillo	118,336	159,921
Devonian Oil Co., Tulsa, Okla.	15,693	10,432
Dye & Gillette, Tulsa, Okla.	1,705	1,694
Developers Oil & Gas Co., Wichita Falls	478	374
Davis & Kurtz, Wichita Falls	444	313
Driscoll, R., Estate, Corpus Christi	27,013	18,936
Deutser, B., Tr., Beaumont	154	106
Duval Oil Corp., San Antonio	40,033	27,748
Derby, Haines & Williams, Wichita, Kans.	501	125
Derby Oil Co., Wichita, Kans.	3,502	1,960
Derby Oil Co., Wichita, Kans.	5,044	3,488
Derby Oil Co., Wichita, Kans.	297	76
Dale, Jack B., Wichita Falls	3,310	2,537
Duffield & Howard Oil Co., Tulsa, Okla.	607	321
Dye & Gillette, Tulsa, Okla.	5,361	3,804
Davis, Louise R., Tulsa, Okla.	1	1
Davis, Beatrice H., Tulsa, Okla.	1	1
Dunaway, J. E., et al, Wichita Falls	2,342	1,364
Deako Oil Co., San Antonio	5,208	3,641
D. & L. Production Co., Houston	23,823	22,172
Dale-Knotts Oil Co., Wichita Falls	249	205
Dalton, Jack Oil Co., Mineral Wells	739	676
Davis Oil Corp., Vernon	30,505	22,928
Dale Crawford Oil Co., Electra	613	487
Danciger Oil & Ref. Co. of Texas, Fort Worth	471,677	259,477
Deep Rock Oil Co., Fort Worth	271,217	130,993
Dennis, J. S., Moran	1,581	1,289
Dash Production Co., San Antonio	65,695	67,370
Duquesne Oil Corp., Eastland	562	470
Douglas Brothers Oil Co., Electra	1,595	1,312
Douglas Brothers & Johns, Electra	342	278
Daniel Drilling Co., Wichita Falls	1,718	1,352
Douglas Production Co., Electra	1,331	1,024
Darby Petroleum Corp., Tulsa, Okla.	30,072	20,201
Dean Oil Co., Burkburnett	302	192
Deering, John A., Houston	27,486	23,506
Dunigan Brothers, Breckenridge	3,913	2,526
Delmar Oil Co., Bartlesville, Okla.	38,296	26,104
Dominion Oil Co., Tulsa, Okla.	516	373
Derose Oil & Gas Co., Amarillo	21,686	13,996
Eubank, R. O. & B. K., Coleman	210	165
Erlewine, A. J., et al, Wilson, Okla.	1,310	985
Electra Production Co., Inc., Electra	942	710
East Batson Oil Co., Batson	12,550	8,745
Engel, E. A., Albany	2,608	2,485
Edmondson, J. M., San Antonio	1,124	723
Ernest Oil Co., Rockdale	71	61
Ellis & DuBose, Fort Worth	1,413	744
Eppenauer, E. L., Tr., Fort Worth	1,166	1,047
Edwards, R. J., Oklahoma City, Okla.	281	257
Edwards, R. J., (12-31-30), Oklahoma City, Okla.	231	267
Erie Investments Limited of Texas, Toronto, Canada	403	341
Eastland Oil Co., Fort Worth	38,129	24,735
Estelle Oil Co., Beaumont	775	620
Easton, E. S., Wichita Falls	905	709
Ellis & Lancaster, Beaumont	217	174
Eddy Oil Co., Beaumont	1,096	876
Eddingston, A. T., Port Arthur	900	558
East Texas Refining Co., Dallas	76,168	21,895
El Rio Oil Co., Amarillo	280	160
Eddleman & Payne, Inc., Wichita Falls	3,633	2,827
Emerald Oil Co. of Texas, Winfield, Kans.	5,174	3,060
Empire Gas & Fuel Co., Maine, Bartlesville, Okla.	365,084	280,387
Easter Oil Corp., Wichita Falls	20,550	15,164
Ewmo Oil Corp., Abilene	689	423
Freeman-Hampton Oil Corp., Wichita Falls	5,856	4,295
Fresno Oil Co., Burkburnett	28,382	19,186
Farish & Ireland Lease, Houston	5,831	4,732
Floyd, K. J., Glendale, Calif.	193	162
Fraser, H. H., Wichita Falls	10,835	8,711
Ferguson, W. R., Wichita Falls	578	384
Fisher, J. A., Wichita Falls	640	495
Fullerton, W. R., Wichita Falls	1,065	685
Fort Bend Oil Co., et al, Houston	20,882	17,650
Fort Bend Oil Co., Houston	14,858	11,085
Flynn, W. B., Inc., Beaumont	4,123	3,111
Fultz, W. B., et al, Graham	2,000	1,938
Fountain Production Co., Saratoga	972	670
Falls Production Co., Wichita Falls	3,716	3,385
Fox, Perry L., and Wm. R. Thorsen, Mertzon	578	428
Ferguson & Watson, Electra	963	757
Fulton, Tom, Wichita Falls	432	381
Farlyn Oil Co., Houston	4,747	2,797
Fleming & Kimbell, Fort Worth	3,787	2,252
F. H. E. Oil Co., Fort Worth	12,078	9,075
Farmers State Bank, Burkburnett	703	482
Fain-McGaha Oil Corp., Wichita Falls	175,246	132,756
Federated Oil Co., Wichita Falls	39,268	15,848
Faith Oil Corp., Wichita Falls	922	694
French Oil Corp., San Antonio	14,850	10,360
Foster Barnsley Syndicates, Inc., Laredo	3,367	2,191
Franklin, Wirt, Ardmore, Okla.	132	108
Four, The Oil Co., Wichita Falls	733	533
Graham, Chas., Myra	609	371
Goodwin, P. B., Tr., Breckenridge	2,427	1,319
Graham & Harrison, South Bend	4,311	4,014
Goldsmith, N. D., Olney	4,213	2,736
Group No. 1 Oil Corp., Fort Worth	844,949	640,425
Gulf Production Co., Houston	5,698,388	3,894,881
Gorsuch Oil Co., Abilene	2,110	1,229
Gillette, C. W. & J. J. Culbertson, Tulsa, Okla., (12-31-30)	210	441
Galvez Oil Corp., Tulsa, Okla.	2,002	1,763
Gilliland-Rosser Oil Co., Wichita Falls	484	328
Gilliland, C. W., Wichita Falls	1,588	1,224
Granite Oil & Gas Co., Ridgway, Colo.	259	198
Grayburg Oil Co., San Antonio	143,573	92,201
G. & K. Production Co., Fredericksburg	1,005	687
Gwynn, P. F., Wichita Falls	13,863	8,649

Name—Address	Barrels	Value
Gwynn, P. F., et al, Wichita Falls	1,132	793
Gwynn-Boyd Drilling Co., Wichita Falls	722	725
Green, W. J., Wichita Falls	679	549
Gardner, Wilson & McCaldin, Wichita Falls	704	549
Golden West Oil Co., San Antonio	17,579	12,166
Golding & Cochran, Wichita Falls	31,184	23,948
Gates Oil Co., San Antonio	990	555
Golding, Dudley S., Wichita Falls	16,913	10,945
Goodwin, P. B., et al, Breckenridge	215	118
Gillman Bros., Amarillo	564	345
Greene Production Co., G. R. Thomas, Receiver Fort Worth	39,298	24,532
Gibson Oil Corp., Amarillo	16,904	10,164
Grisham-Hunter Corporation, Abilene	2,246	1,945
G-I Oil Co., Wichita Falls	4,398	3,056
Gates Oil Co., Ardmore, Okla.	2,230	2,031
Gallagher & Lawson, Cisco	169	150
Gunn Production Co., Cross Plains	648	525
Gilman, R. F. & J. L. McMurray, Cisco	4,442	4,062
Gandy & Peyton, Corsicana	1,534	1,257
Gibson & Cardwell, Wichita Falls	418	582
Gibson & Cardwell, Wichita Falls	495	363
Gatlin Oil Co., San Antonio	2,802	1,956
Gilman & Conway Bros., Ranger	2,884	2,698
Godfrey, F. L., Enid, Okla.	33	30
Grady, Mary E., Electra	334	237
Grady, D., fee, Electra	559	453
Glenridge Oil Corp., St. Louis, Mo.	3,018	3,038
Glass Bros., Rosebud	452	353
Gilbert Co., Beaumont	4,067	2,830
Gordon Oil Co., Logan, Ohio	81	82
Grand Falls Oil Co., Big Spring	1,780	1,349
Grassroots Oil Co., Fort Worth	697	533
Gaither Production Co., Rockdale	536	458
Gray & Adams, Inc., Gainesville	1,421	901
Guthrie, Cole & Ferguson, Wichita Falls	430	239
Gordon & Morris, Breckenridge	708	651
Ginter Jones Oil Co., Nacogdoches	353	252
Ginter Lange Oil Co., Nacogdoches	1,180	876
Gholson, Jno. M. (1-1-30 to 12-31-30), Ranger	13,977	17,942
Gates-Bacon-Lea, Wichita Falls	3,951	2,760
Godley Oil & Gas Co., Dallas	17,915	11,535
Gordon, Ann B. Oil Co., Inc., Dallas	1,914	1,852
Green & Owens (12-31-30), Brownwood	297	417
Gladis Oil Co., Saratoga	2,074	1,214
Halliday, H. J. (12-31-30), Beaumont	1,456	1,463
Hobson & Voorhees (12-31-30), San Antonio	411	484
Huey, Ora (12-31-30), Borger	1,222	1,051
Hutcheson, Frank (12-31-30), Archer City	890	1,061
Hamm, Homer (12-31-30), Henrietta	215	211
H. A. M. Oil Co. (5-1-30 to 7-31-30), Chicago, Ill.	4,524	5,664
Hutchinson Drilling Co. (12-31-30), Borger	1,178	1,085
Hammond, J. G. (12-31-30), Tulsa, Okla.	130	166
Handrick, August, Moran	130	94
Hitchman & Howard, Inc., San Antonio	1,670	1,167
Harrison Oil Co., Houston	68,016	71,372
Hyde & Jones, Albany	379	336
Hefley, McIntosh & Thomas, Cameron	489	373
Hobson & Voorhees, San Antonio	496	347
Hamilton & Martin, Wichita Falls	378	288
Home Oil & Gas Co., Inc., Albany	1,561	1,305
Houghland Production Co., Dallas	1,534	963
Hughes, J. K. Oil Co., Mexia	14,360	12,280
Hanlon Gasoline Co., Tulsa, Okla.	1,170	1,020
Hedrick-Camp Drilling Co., Wichita Falls	1,698	1,098
H. & H. Drilling Co., Seminole, Okla.	408	292
H. & H. Drilling Co. & J. L. Douglas, Albany, Tex., and Seminole, Okla.	893	709
Hamill & Hamill, Bay City	2,918	1,871
Hadlock Oil Corp., El Paso	640	345
Holloway, R. R., Recv., Brownwood	903	900
Hynds & Parker (12-31-30), Graham	642	725
Holloway, R. R., Recv., (12-31-30), Brownwood	854	931
Hodges, F. M., Wichita Falls	154	164
Hammond & Waggoner, (12-31-30), Wichita Falls	1,448	1,520
Hawkins, W. L., Wichita Falls	1,848	1,447
Hope Oil & Gas Co., Fort Worth	9,869	8,923
Herring, S. C., Brownwood	701	714
Hamilton, W. L., Bridgetown	497	399
Hoffman & Page Co., Eastland	22,538	20,625
Hemby, J. M., Electra	873	680
Heydrick, L. C., Wichita Falls	10,634	7,749
Herrogan Oil Corp., Pampa	10,549	5,721
Howard Petroleum Corp., Tulsa, Okla.	872	465
Houston Gulf Gas Co., Houston	6,643	5,084
Halcombe, Thos., Wichita Falls	1,839	1,283
H-Y Oil Co., Inc., Fort Worth	13,344	10,022
Helvetia Oil Co., San Antonio	10,002	6,827
Horn, T. W., Houston	455	354
Harper Petroleum Corp., Bryson	12,830	12,303
Humble Oil & Refining Co., Houston	6,473,850	4,872,825
Herbert Oil Co. of Texas, Fort Worth	4,371	3,815
Hamilton, Walter R., Tr., San Antonio	3,578	2,793
Houston Oil Co. of Texas, et al, Houston	832,612	549,423
Howard, Duffield & Berlin, Tulsa, Okla.	1,059	547
Harrell, J. T., Wichita Falls	1,616	1,110
Hinson, G. D. & R. V. Tidwell, Graham	4,736	4,437
Hickey, T. J., et al, Corsicana	61	61
Houston Production Co., Houston	42,986	36,353
Hunter Oil Corp., Chicago, Ill.	14,868	12,436
Heidrich, E. C., Jr., Amarillo	1,652	984
Hunt, H. L., Tr., Henderson	53,284	22,066
Hynes, F. P., et al, San Antonio	10,819	7,893
Hunter, T. F., Wichita Falls	14,995	12,352
Hull, L. V., Wichita Falls	4,470	3,436
Hill & Dowell, Batson	9,282	6,539
Halmack Oil Co., Dallas	159	200
Hyer, Fred, Fort Worth	12,466	7,216
H. H. Drilling Co. & Douglass, Moran	597	431
Hoppes, W. T., Burkburnett	557	424
Hoppes, W. T., Burkburnett	29	23
Haynes Drilling Co., Shreveport, La.	189,223	85,150
Hobbs, Ferguson & Neeley & Addison H. Gibson, Tulsa, Okla.	11,727	8,165
Humphreys Corp., Houston	396,730	322,252
Harris & Simons, Tulsa, Okla.	2,867	1,709
Holbrook & Woods, Wichita Falls	4,926	3,263
Harwell, E. P., Tulsa, Okla.	721	599
Huey, Ora, Borger	970	562
Hines, Harry, Wichita Falls	1,724	1,238
Holmes Bros., Amarillo	14,146	9,562
Holmes, Hill, Seibold & Holmes, Amarillo	11,761	6,949
Holmes, W. H. & W. W., Amarillo	3,022	1,923
Holmes Bros., Moore, Amarillo	3,861	2,424
Humber, J. M., Petroleum Co., Borger	15,980	8,917
Hawley, J. A., Ottawa, Ont., Canada	165	145
Hardie, J. M. & Co., Sour Lake	62	42
Hayes, Reese L., Wichita Falls	1,498	1,248
Hayes, Reese L., Wichita Falls	1,240	704
H. B. J. Oil & Gas Trust, Baltimore, Md.	1,369	1,100
Hambleton, Geo., San Antonio	366	246
Hardy Oil Co., Wichita Falls	1,529	1,647
Hamilton, W. B., Wichita Falls	146,175	69,539
Hammon, W. H., Wichita Falls	15,905	12,762
Hammon & Heyser, Wichita Falls	8,870	7,112
Hobbs Oil Co., Tulsa, Okla.	1,218	931
Hays, F. C., Tr., Tulsa, Okla.	1,393	1,304
Hamon, Jake L., Ardmore, Okla.	21,028	19,538
Hickory Oil & Gas Corp., Fort Worth	4,724	4,686
Hemisphere Oil Corp., New York, N. Y.	11,140	6,888
Hoffman, P. L., Cisco	6,919	4,434
Hammond & Waggoner, Wichita Falls	425	301
H. H. Drilling Co. and J. L. Douglas, Seminole, Okla., and Albany, Texas	893	697
Investors Oil & Gas Co., (12-31-30), Sioux Falls, S. D.	1,263	1,482
Isaacs, B. K., Recv., J. K. Hughes Dev. Co., Fort Worth (12-31-30)	487	458
Irick Oil Co. (12-31-30), Waskom	149	146
Irick Oil Co., Waskom	314	252
Investors Oil & Gas Co., Sioux Falls, S. D.	1,011	994
Jones, Hugh (12-31-30), Burkburnett	3,013	3,019
Jones, W. A., Minerva	240	171
Jason Oil & Gas Co., Inc., (12-31-30), Houston	78	78
Janellen Oil Co., Tulsa, Okla.	147	103
Jones, Edwin M., San Antonio	517,056	290,627
Johnson Bros., San Antonio	5,119	3,751
Jones, O. P. & C. J. Oates, Amarillo	540	324
Jones, J. A., Moran	145	122
Julia Oil Co., Sour Lake	3,066	2,127
Jonray Oil Co., San Antonio	1,864	1,777
Justin Oil Corp., Wichita Falls	5,633	4,227
Jones, J. E., Wichita Falls	2,547	1,807
Jackson, T. H., Sipes Springs	59	54
Jones, Hugh, Burkburnett	2,379	1,692
Jacob Oil & Gas Co., Graham	4,059	2,653
Jackson, J. S., Tr., Sour Lake	2,595	1,790
Judson Oil Co., Tulsa, Okla.	5,869	4,547
James, Tom, Albany	3,619	3,334
James & Klinger, Albany	622	466
Johnson Oil Co., Wichita Falls	47,822	54,093
Klemcke, George, Tr. (12-31-30), Von Ormy	1,452	1,149
Kavanaugh Petroleum Co., Houston	1,704	1,291
Kiser & Fleming, Albany	2,225	1,351
Kerr, T. P., Corsicana	554	461
Kleinfelder, B. F., Breckenridge	309	278
Kimmell & Woofter, Wichita Falls	3,251	1,872
Keck Investment Co., Los Angeles, Calif.	5,260	2,982
Kent, G. C., Corsicana	17,630	14,784
Koenig, Max W., Oakland, Calif.	15,736	10,638
Keystone Production Co. of Texas, Fort Worth	2,503	2,361
Knotts, Nona A., Wichita Falls	585	460
King, R. A., Tr., Wichita Falls	1,202	830
Kay, A. W. & W. B. Fultz-J. Kisinger Farm Graham	3,279	3,081
Kirby Petroleum Co., Houston	122,866	69,108
Kahle, Gracey & Kiver, Dallas	1,613	967
Kelly, Geo. L., Tr., Wichita Falls	534	387
Kay, A. W., Recv., Graham	406	309
Knox, D. M., Graham	4,458	3,911
Kewanee Oil & Gas Co., The, Titusville, Pa.	115,620	98,471
Kimbell, G. T. & John L. Bostic, Burkburnett	3,589	3,015
Kurz Oil Co., Somerset	406	242
Kate Bell Oil Co., Dallas	681	651
Kisk Oil Co., Wichita Falls	163	109
King & Daniel, Wichita Falls	4,163	3,095
Keener Oil & Gas Co. of Texas, Tulsa, Okla.	3,596	2,682
Kaufman, L., San Antonio	317	190
Kidney-Kamon et al, Fort Worth	2,852	2,700
Kendrick, P. S., Albany	2,441	2,096
Kohlman, Richard, Iowa Park	347	242
Kolp, C. F., Tyler	13,775	10,480
Kolp, C. F., et al, Tyler	47,557	19,559
Keller, J. E., Iowa Park	159	95
King Royalty Co., Wichita Falls	193,518	126,721
Klemcke, George, Tr., Von Ormy	1,347	829
Killam, O. W., Laredo	292,860	204,767
Kuhlemeier-Kleiner Oil Co., Cisco	2,266	1,874
Kleiner, Charles J., Cisco	28,383	19,861
Kepley Production Co., Laredo	7,766	5,857
Kistler, Frank E. & Co., Inc., San Antonio	3,166	1,600
Kemrow Company, Wooster, Ohio	11,915	8,438
Larcro Gas & Petroleum Co. (12-31-30), Rufugio	59,618	41,136
Laredo Oil Co. (12-31-30), Laredo	708	777
Lynn Oil Co., Inc., (12-31-30), Brenham	400	240
Loggie & Arendt Oil Co., Albany	2,122	1,718
Lockhart & Co., Los Angeles, Calif.	79,098	53,893
Layne, L. A., Houston	3,649	2,805
Lewis, J. E., et al, Eastland	893	782
Lefors Petroleum Co., Lefors	19,716	13,215
Lackey, W. G. Co., Tulsa, Okla.	2,020	1,751
Lake Graham Oil Co., Houston	2,437	1,857
Lesh, Kilcrease & Co., Nocona	1,870	1,105
Lesh & McCall, Nocona	7,810	4,660
Little, Wm., Breckenridge	249	237

Name—Address	Barrels	Value
Lee & Scott, Inc., Houston	2,570	2,056
Lee & Wilson, Houston	4,625	3,582
Landreth Production Corp., Fort Worth	157,970	98,618
Lido Oil Co. & McGinley Corp., The, Wichita Falls and Fort Worth	12,107	6,457
Lewis Production Co., Pittsburgh, Pa.	17,805	13,110
LaSalle Petroleum Co., Tulsa, Okla.	3,339	2,431
Lion Oil Refining Co., El Dorado, Ark.	530,701	311,942
Lloyd Oil Corp., Fort Worth	16,797	7,558
Lloyd Oil Corp., (12-31-30), Fort Worth	23,646	21,518
Leck Royalty & Oil Co., Fort Worth	3,083	2,971
Len-Cook Oil Co., Electra	362	247
Luling Oil & Gas Co., San Antonio	29,255	20,403
Lytle, C. F., Mexia	7,379	6,143
Lake View Oil Co., Sour Lake	9,479	6,613
Lone Star Gas Co., Dallas	21,405	20,217
Leiser-Rochmill Production Co., Fort Worth	1,220	1,107
Linedo Oil Co., Lincoln, Neb.	264	182
Little Flower Oil Co., St. Louis, Mo.	395	311
Larcro Gas & Petroleum Co., San Antonio	44,428	30,655
Lone Star Gasoline Co., Dallas	5,634	5,096
Letwin & Lippitt, Breckenridge	15,008	14,287
Leonard, Geo., Somerset	882	551
Lebow, C. H., Tulsa, Okla.	1,135	910
Lawson, Eugene B., Tulsa, Okla.	27,115	19,589
Lowe, Delaney & Carter, De Leon	1,839	1,314
Lee, Homer, Wichita Falls	9,933	7,013
Long, C. B., et al, Wichita Falls	288	201
Lowenstein Oil Co., Rockdale	800	731
Louisiana Oil Refining Corp., Shreveport, La.	235,027	195,154
Lide-Tayloe Oil Co., Inc., Shreveport, La.	122,415	57,440
MacDermott, W. F., Fort Worth	511	454
McLean, Marrs, Beaumont	12,920	10,042
McCrea, L. H. (4-1-29 to 12-31-30), Cisco	730	747
McHugh, G. E. (12-31-30), Graham	200	158
McDaniel, D. B., Houston	40,600	31,274
McAlbert Oil Company, Inc., Houston	144,396	113,549
McCormick & Noack-Wooten, Rockdale	55	33
McNamara Oil Company, Beaumont	2,050	1,427
McMurray, J. L., Cisco	1,673	1,623
McNallen & Griffin, Tulsa, Okla.	5,372	4,783
McCrary, E. W., Tulsa, Okla.	4,438	3,766
McKanna, Inc., Wichita Falls	3,963	4,272
McDonnald & Campbell, Dallas	5,092	3,656
McLester Oil Company, Eastland	6,877	7,091
McCarty Oil Company, Wichita Falls	120	96
McClintock, J. G., Amarillo	4,687	2,979
McCarty Oil Company, Wichita Falls	58,694	48,497
McJunkin, Florence T., Tulsa, Okla.	363	339
McFall, J. M., Wichita Falls	494	361
McCutchen, C. E., Trustee, Wichita Falls	2,865	2,399
McMurray, Root & Rhodes, Eastland	786	734
McCutchen, C. E., (Petroleum Producers Co-Operator), Wichita Falls	180	140
McBride, W. C., Inc., St. Louis	5,063	3,347
McDaniel Oil Corporation, Cisco	4,380	4,125
McGinley Corporation, The, Fort Worth	3,026	1,614
McCarter, R. C., Rising Star	1,300	1,093
McChesney, Nancy, Olney	1,194	721
McIlroy Oil Co., Amarillo	25,970	3,966
Moore, Geo. N. & Henry Zweifel, Rec. for Cosden Oil Company, Fort Worth	190,955	128,465
Mid-Continent Holding Corp. (12-31-30), Wichita Falls	14,557	16,841
Mid-Continent Holding Corp. (10-1-30), Wichita Falls	16,044	24,082
Meredith & Benton & Curt Horrmann, Cisco, (12-31-30)	426	537
Mitchell, Frank A., (10-1-29 to 12-31-30) Wichita Falls	27,934	38,994
Medio Oil Company, San Antonio	687	548
Martin Petroleum Company, Humble	2,93?	2,346
Montgomery-Rea-Montgomery, Sedwick	1,032	945
Major, A. W., Laredo	1,283	885
Mennis, G. W., Estate, Wichita Falls	2,677	1,837
Martin, N. H., Wichita Falls	8,403	5,673
Martin & Hamilton, Wichita Falls	2,158	1,560
May, F. N. (12-31-30), Santa Anna	110	102
May, F. N. (3-31-31), Santa Anna	98	92
Mills & Garitty, Corsicana	2,475	1,733
Minerva Petroleum Company, Minerva	282	210
Minor Oil Company, Beaumont	8 230	5,678
Martin, Drake & Jones, Houston	18,256	18,967
Mount & Lee, Inc., Wichita Falls	1,643	1,175
Midland Oil Company, Fort Worth	293	245
Moody Corporation, Lewis Fisher & Thos. H. Ball, Rec., Houston	509,046	344,200
Mid-Texas Petroleum Company, Oklahoma City, Oklahoma	12 435	11,334
Mordyan Petroleum Company, Pampa	16,363	11,402
Mues & MacDermott, Fort Worth	316	276
Marnet Oil & Gas Co., Tulsa, Okla.	4,442	3,839
Mid-Continent Petroleum Corporation, Tulsa, Okla.	17,208	14,006
Moss, Urschel & Keys, Dallas	5,248	4,384
Moss & Urschel, Dallas	11,160	9,690
Meredith & Gant, Wichita Falls	1,793	1,416
Menke, John G., Wichita Falls	821	633
Mills Bennett Production Company, Houston	321,224	255,231
Midwest & Gulf Co. of Texas, Trust Estate, Tulsa, Okla.	1,512	927
Medina Oil & Refining Company, Hondo	465	558
Minntex Oil Corporation, Wichita Falls	616	414
Moore, N. A., Eastland	598	532
Moran, J. J., et al, Wichita Falls	4,311	2,705
Mudge Oil Company of Texas, Pittsburgh, Pa.	200	116
Macknold Company, San Antonio	210	125
Mitcham, G. P., Cisco	984	816
Madison Oil & Gas Company, Electra	2,730	2,093
Mitchell, Frank A. (3-31-31), Wichita Falls	2,741	2,068
Mid-Kansas Oil & Gas Co., Findlay, Ohio	3,948,907	2,345,206
Magnolia Petroleum Company, Dallas	2,188,931	1,524,242
Maxwell, J. C., Fort Worth	39,679	23,166
Moss, George, Batson	641	442
Merrick & Belcher, Wichita Falls	4,443	3,680
M. & V. Oil Co., Wichita Falls	2,487	1,653
Merrick & Goldsmith, Wichita Falls	2,824	2,309
Merrick, John F., Wichita Falls	358	249
Morgan, Ray, et al, Fort Worth	702	660
Mendenhall Oil Company, Cisco	1,037	984
Meridian Petroleum Corporation of Texas, Tulsa, Oklahoma	5,234	3,996
Madden & Hunt, Olney	6,316	4,968
Magee, R. B., Wichita Falls	1,199	745
Madden, E. B., Olney	12,262	7,367
Moran Company, The, Wichita Falls	6,782	4,793
Meredith, J. D., Moran	2,971	2,191
Massie, J. H., Wichita Falls	33,757	24,302
Mark Finston Special Account (Old O. P. & G. Co. Leases), Tulsa, Okla.	8,484	5,877
Millikin, L. L., Burkburnett	248	169
Murchison Oil Company, Dallas	55,102	33,519
Marts, E. R., et al, Dallas	39,870	24,577
Mayberry, C. R., Company, Laredo	1,690	1,166
M-C-H Company, (Ada McLemore, Owner, Albany	3,263	2,007
Medina Oil & Gas Association, San Antonio	83	51
Merrick & Bristow, Ardmore, Okla.	41,395	21,793
Merrick & Lamb, Ardmore, Okla.	25,927	18,501
Moody-Seagraves Producing Company, Houston	683,768	623,866
Milham Corporation of Texas, Fort Worth	1,296	1,020
Nimrod Oil Co., (12-31-30), Dallas	19	20
Nunn-Stubblefield Oil Co., (9-30-30), Amarillo	16,953	22,581
Nunn-Stubblefield Oil Co., (12-31-30), Amarillo	19,062	18,258
Nunn-Stubblefield Oil Co., (3-31-31), Amarillo	11,336	7,292
Neal, Warren P., (12-31-30), Brownwood	94	39
Newport & Ohio Petroleum Co., Newport, N. Y.	386	287
Navarro Oil Company, Houston	125,164	99,795
Newton & Lillie, Shreveport, La.	17,790	14,796
Noack & Lanning—Phillips & Perry, Rockdale	76	63
Noack & Lanning—Shelton, Rockdale	155	112
Noack Oil Company, Rockdale	901	777
Nash-Windfohr & Perry, Austin	47,213	39,037
Nash & Windfohr Oil Corp., Graham	44,881	39,622
Newton-Palmer Oil Company, Rockdale	215	192
Nutt & Gates, Wichita Falls	1,325	1,098
Nabob Oil Company, Amarillo	14,278	10,207
North Fork Oil Company, Amarillo	1,116	692
Number Nine Oil Corporation, Tulsa, Okla.	2,014	1,466
National Oil Company, San Antonio	585	348
Owen-Sloan Oil Company, Philadelphia, Pa.	44,395	21,820
O. & A. Company, Laredo	1,981	1,404
Oil Fields Corp. of Arkansas, El Dorado, Ark.	12	11
Oil Investment Company, Wichita Falls	1,603	1,215
Oriental Oil Co., Dallas	338	276
O'Neil John, Wichita Falls	7,736	6,661
Olney Oil & Refining Co., Wichita Falls	99	82
Orange Petroleum Corporation, Orangefield	26,094	21,178
Ohio Somerset Oil Co., The, Cleveland, Ohio	1,083	702
Oasis Oil Company, Wichita Falls	90	66
Olean Petroleum Company, Bristow, Okla.	8,851	5,841
Oklahoma Company of Texas, Tulsa, Okla.	2,945	1,541
Oldom, Wm. P., Iowa Park	487	320
O'Brien, W., Amarillo	470	258
Pearson Oil Co., San Antonio	45	40
Pure Oil Co., The Chicago, Ill.	2,208,259	1,741,803
Pure Oil Co., The, Chicago, Ill.	570,440	446,544
Pennowa Oil & Gas Co., Skiatook, Okla.	7,006	6,448
Piner, R. T., Big Spring	2,484	1,661
Pansota Oil Co. (10-1-30), Amarillo	2,734	2,049
Pansota Oil Co. (12-31-30), Amarillo	3,783	4,368
Pansota Oil Co. (3-31-31), Amarillo	1,890	1,147
Pitzer & West (9-30-30), Breckenridge	1,245	1,645
Pioneer Oil, Gas & Refg. Co., Danville, Ill.	877	620
Panhandle & Santa Fe Railway Co., Wichita Falls	4,382	2,191
Price-Russell & Co., Ranger	3,094	2,956
Pettit Oil Corp., Trees, La.	1,425	1,384
Phillips Petroleum Co., Bartlesville, Okla.	1,203,795	822,078
Pecos Crude Oil Purchasing Co., San Angelo	1,513	405
Pratt, Thos. H. (12-31-30), Brenham	134	80
Powell, H. J., Tr. (12-31-30), San Antonio	4,241	4,241
Pratt, Thos. H. (3-31-31), Brenham	176	105
Piper, L. E., Tr., Vernon	1,684	1,364
Permian Oil Co., Eastland	2,979	2,939
Poor Boy Oil Co., Rockdale	203	155
Primrose Refining Co., Wichita Falls	20,454	13,282
Putnam Supply Company & McGee, Albany	353	268
Piney Oil & Gas Co., New York	2,339	1,225
Pollard, W. E. & C. E., Pampa	2,795	1,563
Producers & Refiners Corp. of Texas, Independence, Kansas	5,056	4,523
Palmer & Burch, Inc., Wichita Falls	6,120	4,544
Primrose Oil Co., Sour Lake	1,020	816
Paraffine Oil Co., The, Houston	14,582	10,184
Pemeta Oil Company, Fort Worth	3,116	2,487
Philip Bros., Beaumont	3,032	2,117
Perkins & Snider Lease, Wichita Falls	4,379	3,001
Pivoto, M. E., Sour Lake	5,567	3,915
Plymouth Oil Company, Pittsburgh, Pa.	79,525	47,411
Producers Oil Company, Tulsa, Okla.	62,029	44,730
Powell, J. L., Estate, Wichita Falls	274	201
Prairie Oil & Gas Co., Independence, Kansas	656,185	448,549
Plains Drilling Co., Amarillo	15 072	20,558
Petroleum Marketing Corp., Houston	77,404	27,091
Porterfield, R. R., Tyler	1,890	1,236
Proctor, George, Wichita Falls	16,286	13,049
Producers Supply & Tool Co., Marietta, Ohio	19,168	15,040
Putnam Oil Company, Tulsa, Okla.	28,148	24,664
Perry, Thos. H., Wichita Falls	1,728	1,626
Pilkerton, F. L., Burkburnett	823	534
Phillips, J. R., Amarillo	678	321
Panhandle Refining Company, Wichita Falls	97,667	77,535
Perkins & Cullum, Wichita Falls	98,814	69,806
Pois, M., et al, Wichita Falls	3,206	2,579
Pois, M., Trustee, Wichita Falls	144	116
Pois, Fine & Schulz, Wichita Falls	558	415
Producers Drilling Co., Wichita Falls	1,630	1,204
Pursel, Carl, Tr., for Darby Lynde Co., Tulsa, Okla.	14,855	11,102
Pitzer & West, Breckenridge	15,210	14,326
Penn Oil Company, Dallas	11,605	8,303

Name—Address	Barrels	Value
Pace & Ward, Breckenridge	553	480
Poole, B. O., Batson	1,981	1,380
Paggi Bros. Oil Co., Beaumont	7,494	5,171
Paggi, Chas. & Co., Beaumont	457	315
Peckham, F. W., Stamford	957	624
Powers Production Company, Houston	2,652	1,648
Petroleum Producers Company, Wichita Falls	107,421	75,571
Pomykol, Joe Jr., Brenham	300	180
Quinn, J. W., et al, Eastland	1,654	1,606
Quincey Oil Co., Vernon	151	118
Reinhart, M. J., Tr., (12-31-30), Okla. City, Okla.	428	458
Robert Oil Corporation, (12-31-30), Breckenridge	18,221	20,201
Ross, James F., (9-30-30), Laredo	2,313	1,966
Ross, James F., (12-31-30), Laredo	2,622	2,107
Ross Amigos Oil Co., (9-30-30), Laredo	7,826	6,652
Ross Amigos Oil Co., (12-31-30), Laredo	8,268	6,370
Ross Segunda Oil Co., (9-30-30), Laredo	347	295
Ross Segunda Oil Co., (12-31-30), Laredo	361	271
Richardson & Kelsey, Fort Worth	50,170	30,641
Red River Oil Company, Tulsa, Okla.	24,409	18,742
Reinhart, M. J., Tr., (3-31-31), Okla. City, Okla.	410	367
Rockdale Junior Oil Co., Rockdale	153	113
Randall, W. S., Okla. City, Okla.	764	603
Republic Supply Co., Houston	4,670	3,247
Reeves, Riley & Reeves, Goldbush	515	681
Richardson Trust Co. & M. L. Dresser, (12-31-30), Markley	1,246	1,134
Richardson Trust Co. & M. L. Dresser (10-1-30), Markley	1,695	2,134
Ranell Oil Company, Okla. City, Okla.	3,592	2,091
Robinson, Arthur D., Dallas	5,107	3,863
Ruby Oil Company, Minerva	82	51
Roberts, H. W., (12-31-30), Wichita Falls	1,621	1,811
Roberts, H. W., (9-30-30), Wichita Falls	1,776	2,540
Ramming, R. W., Wichita Falls	683	478
Ramming, Staley & Ramming, Wichita Falls	542	401
Ramming, W. F., Wichita Falls	126	98
Robins, J. W., Tr., Owenwood Pool No. 3, Fort Worth	3,409	2,923
Ramsel, W. T. Oil Co., Rockdale	1,310	1,093
Royal Producing Company, Houston	766	529
Robinson, J. B., Sour Lake	204	141
Roeser & Pendleton, Inc. Fort Worth	185,773	154,640
Rio Bravo Oil Company, Houston	376,160	316,429
Roth & Faurot Oil & Gas Co., Independence, Kan.	203	217
Roy Long Oil Company, Navasota	1,351	1,115
Rex Petroleum Corporation, Vinton, La.	15,132	12,444
Reiter-Foster Oil Corporation, Tulsa, Okla.	5,173	4,174
Rowe, J. G., Wichita Falls	1,730	1,336
Right-of-Way Oil Co., Fort Worth	570	473
Rentex Oil Company, San Antonio	6,616	4,577
Reed, Crenshaw & Glass, Nowata, Okla.	8,576	5,927
Republic Production Company, Houston	390,840	283,782
Ruyle Farm & Oil Company, Wichita Falls	6,499	5,048
Rountree, White & Kemp, Rockdale	322	265
Regan, J. T., Rising Star	1,884	1,640
Rubsam & Hunter, Wichita Falls	5,163	3,244
Ruthada Oil Company, Okla. City, Okla.	14,329	10,226
Reeder & Scarborough, Wichita Falls	3,278	2,521
Ribble, O. C., (3-31-31), South Bend	261	232
Ribble, O. C., (12-31-30), South Bend	289	322
Rathke Oil Company, Wichita Falls	20,862	15.174
Rochmill, Henry, Tr., Fort Worth	477	300
Ryan Consolidated Petroleum Corp., Tulsa, Okla.	42,209	27,048
Riner & Omohundro, Wichita Falls	8,010	6,247
Riner & Bailey, Wichita Falls	20,198	15,464
Rush-Anderson & Moor, Dallas	15,979	11,650
Rancho Oil Company, Fort Worth	4,967	3,491
Robinson, O. D., Pittsburgh, Pa.	781	734
Ross, James F., (3-31-31), Laredo	2,275	1,569
Ross Amigos Oil Co., (3-31-31), Laredo	8,167	5,999
Reno Oil Company, Sistersville, W. Va.	37,336	29,465
Randado Oil Corporation, Okla. City, Okla.	13,704	9,456
Robert Oil Corporation, Breckenridge	76,072	40,193
Rockwell, J. A. & Company, Warren, Penna.	1,945	1,457
Rhodes & Highers, Breckenridge	4,869	4,272
Riggs & Oliphant, Graham	3,798	3,168
Riggs, E. R., Graham	90,899	55,551
Root, Rhodes, Gilman & McMurray, Eastland	4,778	4,614
Reclamation Company, The, Fort Worth	4,524	3,932
Robertson, R. R., Wichita Falls	1,814	1,332
Reed, W. M., Breckenridge	1,221	966
Rock Creek Oil Corp., Amarillo	4,613	1,817
Russell & Wilson, Wichita Falls	4,396	2,475
Ruthada Oil Company for H. L. Sturn, Ardmore, Okla.	4,958	3,442
Rhodes, Highers & Christie, Breckenridge	166	133
Root, C. M., Eastland	2,345	2,100
Root & Fehl, Eastland	2,339	1,994
Root & Rhodes, Eastland	3,548	3,052
Refugio Oil Corporation, Refugio	6,270	4,326
Ross Segunda Oil Co., (3-31-31), Laredo	270	186
Swearingen, W. R., et al, San Antonio	1,494	1,107
Stanolind Oil & Gas Company, Tulsa, Oklahoma	1,039,509	640,892
Saxet Oil Company, The, Houston	313,528	248,410
Smith & Ash, Wichita Falls	9,731	6,393
Shappell Oil Company, Wichita Falls	42,123	32,722
Smith, R. E. (12-31-30), Houston	7,005	6,269
Smith Salvage Company (12-31-30), Houston	1,809	1,809
Straughan & Texanneti Oil Co. (12-31-30), Mertzon	1,828	1,873
Spencer, H. E., Tr. (12-31-30), St. Louis, Mo.	829	808
Shallow Sand Oil Company (12-31-30), Fort Worth	217	225
Swanner, John L., Wichita Falls	1,308	978
Smith & Bynum, Amarillo	570	439
Smith, Mrs. James L., Amarillo	2,793	1,752
Smith, McIntosh & Thomas (Coulter Ise.), Cameron	962	795
Stratton, Ed. F., Pioneer	262	201
Simmons, T. K., Tulsa, Okla.	1,137	936
Shankle Newton Oil & Gas Company, Inc., Laredo	70,136	49,079
Simpson Fell Oil Company, et al, Ardmore, Oklahoma	8,356	5,833
Starcke, Max, Rec., Cause A-66, Seguin	14,278	11,945
Supreme Oil Company, Orange	1,344	1,075
Stelsky, Joe and Hefley, Rockdale	262	216
Southern Drilling & Production Company, Bay City	11,601	10,046
South Oil Company, The, (3-31-31), Rosston, Ark.	452	421
South Oil Company, The, (12-31-30), Rosston, Ark.	450	513
Summitt Oil & Refining Company, Amarillo	147	95
Stein, H., Ranger	166	152
Staley, J. A., Wichita Falls	2,669	2,256
Sentinel Petroleum Corporation (12-31-30), Chicago	77	83
Scott, W. M., Wichita Falls	2,069	1,188
Sheffield Oil Company, Houston	4,809	3,847
Smith, McIntosh & Thomas (Henry Ise.), Cameron	438	353
Shattuck, Mrs. Nellie S., Dallas	2,468	2,155
Skinner, E. W., Oil Company, Saratoga	4,078	2,773
Smith, E. L., Oil Company, Inc., Mexia	118,571	89,486
Star Drilling Company, Wichita Falls	14,693	12,114
Saratoga Oil Company, Wichita Falls	622	451
Storey Friebele Duffey Oil Company, Winston-Salem, North Carolina	4,013	2,317
Storey Friebele-Duffey Oil Company, Winston-Salem, North Carolina	20,804	11,491
Schaffner, E. N., Cross Plains	342	315
Sircovich, A., and Mrs. F. M. Thoams, Houston	542	307
Stella Oil Company, Beaumont	11,357	9,085
Stovell, E. C., & Son, Graham	2,603	2,587
Sinclair Oil & Gas Company, Houston	200,880	164,549
Standard Oil Land & Leasing Company, Electra	141	99
Staniforth, M., Wichita Falls	3,834	2,647
Smith Levi, et al, Texon	8,641	8,015
South Shore Oil Company, Houston	3,980	3,714
Selby Oil & Gas Company, Tulsa, Okla.	4,922	4,854
South Texas Petroleum Company, Houston	99,064	101,368
Simms Oil Company, Dallas	801,166	493,846
Scarborough, W. A., Burkburnett	1,485	1,078
Simpson, O. H., Fort Worth	1,202	788
Schlaffke & Blair, Electra	11,523	9,157
Schlaffke, Edward, Electra	85	81
Schermerhorn Oil Company, Tulsa, Okla.	122,136	62,826
Salado Oil Company, San Antonio	1,418	1,034
Straughan & Texannati Oil Company, Mertzon	1,842	1,211
Sinclair Oil & Gas Company, Tulsa, Okla.	196,552	111,766
Shell Petroleum Corporation, St. Louis, Mo.	3,545,257	2,580,968
Summerfield Oil Company, Tulsa, Okla.	144	105
Sheldon, C. P., Electra	5,394	3,868
Snowden & McSweeney Company, New York	41,430	35,045
Spencer, H. H., & Company, Burkburnett	270	192
Stidham & Thrasher (9-30-30 and 12-31-30), Electra	1,549	1,259
Stidham & Thrasher (3-31-31), Electra	635	437
Sessions, I. P., Rockdale	352	286
Syndicate Oil Corporation, Rochester, N. Y.	402	381
Sipe Springs Oil Company, Tulsa, Okla.	4,397	3,870
Southern Crude Oil Purchasing Co., Fort Worth	1,482,128	862,071
Slicker, Homer, Cisco	810	688
Sand Creek Oil Company, Amarillo	1,048	628
Speed, C. D., Corsicana	172	145
Somerset Oil Company, San Antonio	835	539
Somerset Crude Oil & Refining Company, Somerset	2,375	1,548
Southern Petroleum Exploration, Inc., Sisterville, West Virginia	18,918	12,527
Sedwich & Webb, Albany	618	502
Sherman Oil & Gas Company, Sherman	850	467
Smith, W. B., Tr., Eastland	331	270
Schermerhorn-Winton Company, Tulsa, Okla.	61,162	35,437
States Oil Corporation, Eastland	41,642	37,900
Shasta Oil Company, Wichita Falls	191	130
Sink, Joel, Corsicana	191	173
Smith & McDonald, Electra	924	665
Smith & McDonald, Electra	12,401	7,596
Sedwick Oil Company, Tulsa, Okla.	8,286	7,017
Skia-Tex Petroleum Company, Amarillo	10,328	6,892
S R & C Oil Corporation, San Antonio	128,762	93,223
Suloch Oil Company, Amarillo	3,366	3,847
Spencer, H. E., Tr., St. Louis, Missouri	731	609
Stroube & Stroube, Corsicana	55,784	41,593
Southern Petroleum Exploration, Inc., Sisterville, West Virginia	8,509	5,634
Schulz & Weaver, Wichita Falls	7,430	4,207
Sheldon, W. J., Electra	2,511	1,949
Skelly Oil Company, Tulsa, Oklahoma	564,640	349,028
Sandefer-Atkinson-Daniel Oil Corp., Breckenridge	3,110	3,143
Superior Oil Producing Company, Tulsa, Okla.	103	87
Stekoll, Harry, Tulsa, Okla.	17,210	11,173
Seaboard Oil & Gas Co. of Texas, Wichita Falls	23,373	19,451
Sullivan, M. J., Kansas City, Missouri	244	183
Sun Oil Company, Dallas	1,574,591	1,226,272
St. Marys Oil & Gas Company, St. Marys, W. Va.	40,942	29,992
Southwest Royalty Company, Wichita Falls	4,602	3,436
Shaw Oil Company, Wichita Falls	91,042	40,254
Sequoia Oil Company, Fort Worth	36,853	23,954
Sequoia Oil Company, Fort Worth	1,474	958
Saigh, N. A., San Antonio	880	653
Southern Production Company, Rockdale	6,481	4,038
Stock, H. I., Cisco	2,171	1,898
Slick-Seeligson, Inc., Oklahoma City	19,402	20,953
S & W Oil Company, Amarillo	5,069	213
Sunray Oil Company, Tulsa, Okla.	105,578	50,719
Shamrock Oil & Gas Company, Amarillo	106,796	59,103
Sprague Oil Company, Ardmore, Oklahoma	9,512	4,993
Seybert Bros., Mooringsport, Louisiana	1,921	1,874

Name—Address	Barrels	Value
Southern Oil & Production Company, Fort Worth	830	817
Shertzer Bros., Dewey, Oklahoma	4,186	3,922
Stepp & Keister, Coleman	210	147
Shaw, T. G., Oil Corp., Fort Worth	31,584	24,738
Turman, L. C. (W. E. Allen, Receiver), Fort Worth	153,912	113,569
Trimount Petroleum Company, Shreveport, Louisiana	5,137	4,935
Talbot & Markle, Houston	1,147	819
Triangle Oil & Gas Company, Rockdale	628	472
Tannehill, L. B., Albany	17,067	15,156
Texas Fidelity Oil Corporation, Fort Worth	5,161	4,883
Treat, E. M., Oil & Gas Company, Pittsburgh, Pa.	1,042	984
Teddlie, J. E., Liberty	3,406	2,725
Taylor-Sibley Syndicate, Dallas	1,902	1,515
Thomas, J. A., Burkburnett	1,329	994
Traylor-Rutherford Oil Corporation, Refugio	54,094	37,824
Texas American Syndicate, Dallas	14,463	11,455
Thaxton, Nannie S., Executrix, Austin	310	264
Teatsorth, L., et al, Eastland	1,247	1,175
Trinity Production Company, Wichita Falls	233	174
Taconian Oil Company, Wichita Falls	267,782	167,704
Triangle Petroleum Company, Inc., Fort Worth	611	449
Tilton, Elvin, et al, Houston	17,058	11,770
Trevino Oil Corporation, Laredo	20,929	14,786
Taylor-Link Oil Company, Houston	52,822	31,764
Texas Petroleum Company, San Antonio	32,597	19,937
Tex Cal Oil Company, Brownwood	1,882	1,371
Tidwell, R. V., Tr., Graham	4,034	3,643
Tucker, Art, Graham	175	105
Timblin, W. E., Wichita Falls	218	181
Texas Pacific Coal & Oil Company, Thurber	227,324	174,510
Texas Pacific Coal & Oil Company, Thurber	93,348	85,883
Travelers Oil Company, Amarillo	4,528	2,902
Texas Petroleum Development Company, Cameron	3,500	2,870
Texon Oil & Land Company of Texas, Fort Worth	63,215	36,417
Texas Unity Oil Company, Houston	44	413
Texas Consolidated Oil Company, San Francisco California	11,251	11,445
Thomas, J. Elmer, Fort Worth	8	8
Thompson, J. E., Humble	597	477
Thommasson, E. M., & Company, Inc., Denver, Colo.	348	329
Tripplehorn, J. W. and D. R., Fort Worth	2,248	1,988
Towns, M. K., Luling	10,930	8,921
Tegler, F. E., San Antonio	271	321
Turman, L. C., (W. E. Allen, Rec.), Fort Worth	29,601	18,776
Tillman, J. W. (3-31-31), Humble	193	136
Tillman, J. W. (12-31-30), Humble	94	71
Tidwell, H. L., Tr., Graham	846	748
Tripplehorn, D. R., Pampa	4,817	2,875
Texas American Syndicate, Dallas	13,391	8,230
The Texas Company, Houston	2,974,574	2,375,994
Timms-Dietsch Oil Corporation, Amarillo	2,367	1,528
Timms, L. W., Oil Corporation, Amarillo	1,998	1,314
Theis Oil Company, Sour Lake	2,717	2,001
Tucker Oil Company, Wichita Falls	76,347	52,862
Turman Oil Company, Tulsa, Okla.	24,087	19,645
Tholl Oil Company, Beaumont	2,881	2,496
Texas Gas Company, Houston	413	285
Teci Production Company, Breckenridge	1,795	718
Timms-Fogarty Oil Corporation, Amarillo	186	94
Timms-Robinson Oil Corporation, Amarillo	755	513
Tidal Oil Company, Tulsa, Okla.	192,946	109,920
Unice & Carpenter, Houston	1,976	1,765
Underwood Drilling Co. (Erwin lse.), Wichita Falls	712	516
Underwood Drilling Co. (Perkins lse.), Wichita Falls	2,284	1,703
Underwood Drilling Co. (Ward lse.), Wichita Falls	2,263	1,758
Underwood Drilling Co. (Underwood & Campbell lse.), Wichita Falls	628	496
Underwood Drilling Co. (U-C-Ward lse.), Wichita Falls	1,174	976
Union Oil Company of Nevada, Abilene	828	505
United Oil Corporation, Wichita Falls	6,884	4,749
University Lease Section 24, San Angelo	5,649	3,282
United Petroleum Company, Brownwood	162	121
Urban et al, Ranger	145	142
Unity Oil Company, Beaumont	13,638	10,838
Union Oil & Mining Company, Tulsa, Okla.	5,298	4,424
Ungren-Frazier (9-30-30), Abilene	2,760	3,787
Ungren-Frazier (12-31-30), Abilene	2,069	2,327
Ungren-Frazier (3-31-31), Abilene	1,887	1,685
Ungren-Frazier (6-30-30), Abilene	2,926	4,070
United Producers Company, Wichita Falls	32,855	25,762
Union Production Company, Rockdale	2,393	1,943
Upland Oil Company, et al, Pampa	4,293	2,849
United Production Corporation, Houston	934,575	839,836
Vincent, A. G., Receiver (12-31-30), Waskom	149	187
Vacuum Oil Company, Houston	27,852	24,754
Valerio, Inc., San Antonio	411	277
Virginia Oil Association, Inc., Fort Worth	2,381	1,868
Vigil Oil & Gas Company, Wichita Falls	10,091	6,056
Van Wormer, F. E., Wichita Falls	1,235	820
Venmex Oil Company of Texas, Wichita Falls	37,104	32,278
Ventura Oil Company, Wichita Falls	31,141	13,178
Van Cleave Trust, Baltimore, Maryland	236	154
Vitek, Paul, Tr., Fort Worth	16,609	10,549
Warner Oil Company (12-31-30), Pampa	....	3,318
Winrod Oil Company (9-30-30), Amarillo	1,373	1,785
Winrod Oil Company (12-31-30), Amarillo	1,598	1,595
Winrod Oil Company (3-31-31), Amarillo	624	384
Walker, Hall, Ranger	3,441	4,673
Waco Oil Company (1-1-30 to 1-31-31), Waco	837	808
Williams & Williams (12-31-30), Amarillo	831	577
Warner Oil Company, Amarillo	6,648	6,630
Wootten & Reed et al, Graham	2,126	1,594
Woods & Bennett, Humble	5,380	4,408
Wilson Drilling Company, Wichita Falls	10,530	7,999
Waggoner, W. T., Estate, Fort Worth	1,463	1,045
Witcher, Annie L., Guardian, Wichita Falls	3,107	2,460
Wilder, Jack H., Rice	363	328
Wright, H. L., Receiver, Mirando City	17,013	11,868
Why Not Oil Company, Mexia	2,620	2,302
Wieler, J. G., et al, Cross Plains	915	899
Worth Petroleum Company, Fort Worth	5,149	4,602
Waggoner, W. T., Estate, (12-31-30) Fort Worth	2,065	2,156
Webb Oil Company, Humble	3,826	3,123
Waggoner Refining Company (12-31-30), Electra	169,640	173,569
Winch & Henne, Laredo	661	483
Wahpoo Oil Company, Rockdale	771	610
Worth Petroleum Company and George Callihon, Fort Worth	403	290
West, Mrs. Bessie M., Houston	1,711	1,369
Wilson, W. I., Electra	1,007	778
Wolfe, A. T., Wichita Falls	4,715	3,666
Worth Oil Company, Wichita Falls	3,383	1,881
Woodburn Oil Corporation, Dallas	2,776	2,223
West Production Company, Houston	23,920	21,845
Walton, Blair & Schlaffke, Electra	3,774	3,005
Wood, Benton, Lesh & McCall, Nocona	3,578	2,102
West, J. H., Lemon Grove, California	6,500	4,978
Woods, C. D. and C. C., Ranger	520	431
Woody, W. C., Wichita Falls	1,728	1,626
Wilson-Broach Company, Beaumont	10,643	7,406
Washoma Petroleum Company, Enid, Oklahoma	3,676	1,899
Wheelock & Collins, Corsicana	6,157	5,703
Weekley Oil Corporation, Fort Worth	30,365	17,215
Woodruff Development Company, Inc., Cleveland, Ohio	814	587
Wise & Porterfield, Graham	2,188	1,332
Webb, J. R., and J. H. Bryant, Corsicana	173	81
Webb, J. R., Corsicana	175	136
Webb, Luther, Receiver Cosden "D" lse., Vernon	7,563	5,913
Webb, Luther, Rec. Waggoner "P" lse., Vernon	12,481	8,505
Webb, Luther, Vernon	2,551	1,799
Warner Oil Company, Scottsbluff, Nebraska	5,040	3,548
Woods, E. D. and C. C., Ranger	132	135
Wills Oil Company, Rockdale	831	683
White & Duncan, Wichita Falls	5,302	4,148
Wilbarger Oil Company, Wichita Falls	1,042	694
Wichita Production Company, Wichita Falls	8,707	6,900
World Oil Company, Inc., Fort Worth	7,175	3,721
Williams, J. H., Somerset	276	171
Wilcox, H. F., Oil & Gas Company, Tulsa, Okla.	222,728	156,952
Waggoner Refining Company, Inc., Electra	84,842	64,518
West Texas Petroleum Corporation, San Angelo	25,703	16,448
Westheimer & Daube, Ardmore, Okla.	26,370	15,089
White, Lee O. (3-31-31), Pecos	13,637	9,821
White, Lee O. (12-31-30), Pecos	13,816	11,980
Warner-Quinlan Company of Texas, Houston	184,761	124,555
White, James H., Wichita Falls	3,829	2,619
Wolf, D. L., Olney	4,248	2,503
Welch, Chas, (Margaret Oil Co.), Albany	590	454
Watts, C. D., Moran	623	398
Whitfield, B. V., Oklahoma City	173	186
Wo-Mac Oil Company, Wichita Falls	4,457	3,570
Westbrook, R. A., Production Account, Fort Worth	20,958	12,760
Westbrook Oil Corp.—Operating Acct., Fort Worth	61,509	38,155
Wallace & Davis, Minerva	442	363
Wallace & Emrick, Minerva	253	179
Woodley Petroleum Company, Shreveport, Louisiana	42,694	22,044
Wise & Jackson, Sapulpa, Oklahoma	3,629	2,465
Wills, O. C., Burkburnett	1,618	1,123
West, C. K., Breckenridge	1,862	1,668
Weiler, H. J., Wichita Falls	245	138
Waggoner, E. P., and C. F. Kolp, Tyler	2,900	2,145
Weaver & Pois, Wichita Falls	1,896	1,446
Wentz, L. H., Oil Division, Ponca City, Okla.	2,695	1,698
Wallace, Dr. Chas. Wm., and wife, Wichita Falls	40,768	32,538
Williams, Mrs. Cora B., Dallas	3,063	2,865
Witherspoon Oil Company and C. L. Witherspoon, San Antonio	26,020	17,521
Whaley Company, Inc., Fort Worth	170	327
Wilson, Lee, Estate, Wichita Falls	3,587	2,457
Witcher, W. C., et al, Wichita Falls	333	269
Whitehill Oil Corporation, Tulsa, Oklahoma	3,221	2,574
Wilkins, L. A., Burkburnett	4,781	3,585
Weldon Oil Company, Saratoga	9,679	5,683
Ward Oil Corporation, Ardmore, Oklahoma	67,477	33,480
Waco Oil Company, Waco	168	117
City National Bank, Wichita Falls	2,777	3,912
Anderson, G. S., Fort Worth	118,194	44,901
Young, Crothers & Alexander, Inc., Fort Worth	13,580	7,901
Yonkers, F. G. (9-1929 to 12-31-30), Ranger	1,633	1,857
Yount-Lee Oil Company, Beaumont	1,252,422	974,675
Yingling, S. C. (for Southern Oil Corporation), Winfield, Kansas	14,952	5,003
Zadie Belle Oil Company, Mineral Wells	415	389
Schoolfield, R. E., Wichita Falls	197	138
United Petroleum Company (4-1-30 to 12-31-30), Brownwood	589	681
Swearingen Oil Company, San Antonio	2,868	2,096
Stansylvania Oil & Gas Company, Amarillo	3,706	2,133



THIS IS A PHOTOGRAPH OF A McEVOY UNIVERSAL CASING CONTROL HEAD INSTALLATION IN THE EAST TEXAS FIELD. WHEN USED WITH A McEVOY AUTOMATIC SAFETY PRESSURE HEAD, IT AFFORDS COMPLETE PROTECTION WHILE DRILLING AND WHILE RUNNING TUBING. IT DOES NOT HAVE TO BE REMOVED FROM THE WELL AND IS THEREFORE THE IDEAL FOUNDATION FOR CHRISTMAS TREE. WHEN SO MUCH IS AT STAKE, IT DOES NOT PAY TO USE CASING HEAD EQUIPMENT THAT IS IN THE EXPERIMENTAL STAGE. IT DOES PAY TO USE THE McEVOY UNIVERSAL THAT IS PROVEN AND KNOWN TO BE SAFE.

New Equipment for the Field

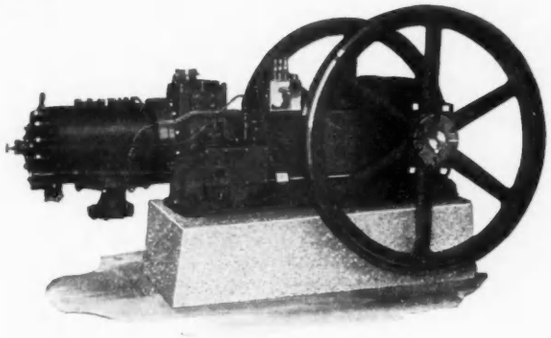
MACHINERY - TOOLS CATALOGS - BOOKS

▼ ▼ ▼

Single Cylinder Diesel

JOSEPH REID GAS ENGINE COMPANY

Joseph Reid Gas Engine Company, Oil City, Pennsylvania, announces a single cylinder, horizontal type full Diesel engine designed for oil field service. It is Type DC Diesel convertible engine rated 40 horsepower at 275 r.p.m. It is a solid injection two-stroke cycle Diesel which may be converted to a gas engine.



Reid Single Cylinder Diesel

A fuel pump and injector nozzle provide a fuel system which functions on fuel or furnace oil of the average gravities. The fuel pump operates from a cam on the engine layshaft.

The engine may be quickly converted from one fuel to the other. The manufacturers announce that two field men can make this change in an hour. Fuel consumption is given as about .4 pounds per BHP hour, while the gas engine uses 11½ cubic feet of gas per BHP hour.

The Reid bulletin number 55, giving power curves and detailed specifications, is available from the manufacturers upon request to the Oil City headquarters.

Welding Elbows

LOCOMOTIVE TERMINAL IMPROVEMENT COMPANY AND A. M. BYERS COMPANY

Locomotive Terminal Improvement Company, Chicago, and A. M. Byers Company, wrought iron manufacturers, in joint announcement apparently answer the long felt need for wrought iron welding elbows.

These new elbows known as "Weldells," range in size from two-inch to 12-inch and are manufactured with the same radius and center to face measurements as standard radius fittings.

In the forging, a tangent is formed on each end, making "Weldells" interchangeable with standard fittings and the ends are beveled 45 degrees for welding. Stock sizes include both standard and light weight (10 gauge) sections. "Weldells" are forged from wrought iron plate with a smooth, uniform internal diameter and a reinforcing rib along both the outer and inner curvature of radius. The process permits "Weldells" to be made from the same material as the balance of the piping system.

Details are available from Locomotive Terminal Improvement Company, Railway Exchange, Chicago.

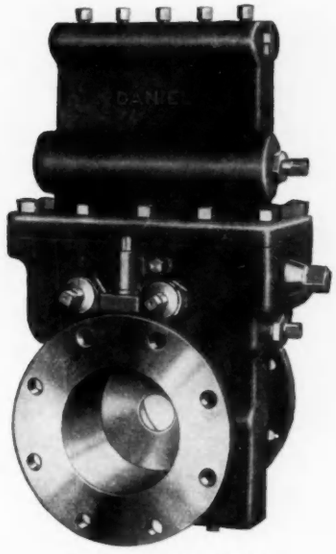
Orifice Fitting

DANIEL & COMPANY

Daniel and Company, 1900 Santa Fe Avenue, Los Angeles, has introduced a new type of orifice fitting. It is compact, simple in construction and operation, and uses the thin type of orifice plate. One design is employed for both high and low pressures with the wall thickness varying for different duties.

An outstanding feature claimed for the fitting is its shut-off valve. This consists of a steel valve which seats on a ground surface with a metal-to-metal contact. The valve is held against the seat with a powerful thrust by eccentrics that are operated by rods leading through the stuffing boxes to the outside of the fitting. The line pressure itself assists in keeping the valve tight and tests up to 2000 pounds per square inch have disclosed no signs of leaking.

The plate holder is raised and lowerd by means of pinions which engage gears on each side of it. These pinions are revolved by rods extending through stuffing boxes. One crank-type wrench alone is used for all operations in changing plates which can be done with the maximum speed and ease.



Daniel Orifice Fitting

Since high temperatures do not affect the operation, the Daniel orifice fitting is equally suitable for steam, natural gas, highly volatile gasoline, oils, water or for any application where orifice meters can be used. It offers maximum safety and simplicity with minimum maintenance. An illustrated circular on its construction and operation will be glady furnished upon request.

▼ NEW EQUIPMENT FOR THE FIELD ▼

Four-Point Reamer

THE WORD SPECIALTY MANUFACTURING COMPANY

The Word Specialty Manufacturing Company, Houston, announces production and deliveries on its new spiral four-point reamer, a simple, rugged, compact tool for keeping the hole out to full gauge by being run immediately above the drill collar. A second reamer installed one joint above the drill collar is to keep the drill stem centered in the hole, and prevent flexing, throwing bit off vertical.

The reamer body is made of chrome nickel steel, and has four large passages grooved in it to permit slush to rise without obstruction. These grooves are designed to give greater clearance for returns around the reamer than can pass a tool joint on the drilling string. The diameter of the opening through the reamer is equal to that of a tool joint reamed out to pass the new type core bits which are run through the drilling string.

The four blades of the reamer are of tool steel, hard surfaced with a diamond substitute. Both ends of the blades are tapered so the tool will ream any obstacle that a tool joint will pass, either drilling or when necessary to ream while coming out of the hole. Owing to the angle at which the blades are set into the reamer body, the lower end of each blade comes within three-fourths-inch of lining up under the top end of the blade ahead, to give maximum contact with the wall of the hole, to provide a continuous reaming action, and to divide the cutting work evenly over the cutting edges of all blades.

Blades are set into a milled groove in the body of the reamer and held in place with a round tool-steel pin, which in turn is locked in place with a large size Allen set screw. All blades are detachable and interchangeable.

Owing to the spiral manner in which the blades are installed in the body of the reamer, cutting is by slicing action.

Word Reamer

Amsco Manganese Steel Welding Rod

AMERICAN MANGANESE STEEL CO.

American Manganese Steel Company, Chicago Heights, Illinois, following the development of the Amsco manganese steel welding rod several years ago in its research department for the company's own use, announces placing this product on the market. The composition is covered by patent application and manganese content is from 13½ to 14 per cent. It is used for repairing or building up Manganese steel castings or other steels. It is stocked in A. S. & W. gauge No. 5 (.207-inch) 36 inches long.

For hard-surfacing, the company has Amsco 459 welding rod, developed by its research department four years ago and more recently tested out in different kinds of field service with success. Amsco 459 is a cast rod about 5/16 inch round, and is kept in stock.

Further particulars on these two products may be secured upon application to the company headquarters.

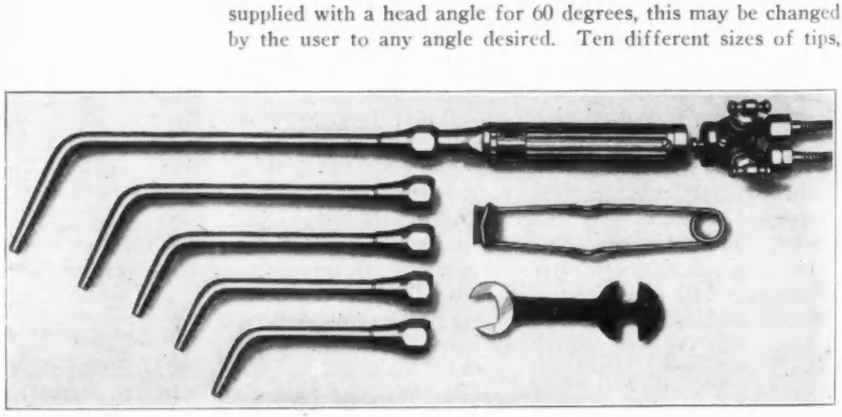
New Prest-O-Weld Blowpipes

LINDE AIR PRODUCTS COMPANY

Linde Air Products Company, 30 East 42 Street, New York, has recently added two new welding blowpipes to its line of Prest-O-Weld medium pressure apparatus, presenting a new idea in blow pipe design. A detachable valve body, to which the handle is secured by a simple and convenient locking device, enables the operator to change quickly from the standard to different handles without detaching hose or hose connections and without the use of a wrench.

Designated as the Prest-O-Weld type W-105 welding blowpipe, and type W-106 welding blow pipe, these two new additions to the line have been designed to provide a medium pressure blowpipe comparable in range to the Oxweld type W-17 welding blowpipe.

Both blowpipes are designed for use with new type, one-piece, hard drawn copper welding tips. Although regularly supplied with a head angle for 60 degrees, this may be changed by the user to any angle desired. Ten different sizes of tips,



New Prest-O-Weld Blowpipes

Numbers 4 to 13, inclusive, are available for use with the type W-105 handle. The type W-105 blowpipe as furnished complete, includes tips Numbers 4, 6, 8, 10 and 12. A stem adaptor is available so that tips for the Prest-O-Weld type W-107 aircraft welding blowpipe may be used with the type W-105. This makes the new blowpipe adaptable for work ranging from the lightest sheet metal welding to heavy welding work requiring a Number 13 welding tip.

The Prest-O-Weld type W-106 blowpipe is similar in design to the type W-105, but smaller. It is supplied with five sizes of tips, Numbers 3 to 7, inclusive, which cover a wide range of usefulness. The type W-106 blowpipe is particularly suited to automobile repair shops for general light welding, bronze-welding small parts, and for soldering. It is also suitable for sheet metal plants in production work. A stem adaptor is available so that type W-107 may be used with the type W-106 handle.

Kibele Tubing Swab

Tubing Swab

KIBELE MANUFACTURING COMPANY

Kibele Manufacturing Company's tubing swab, manufactured at 201 East Cevallos Street, San Antonio, has been introduced for the first time on a large scale into the new East Texas oil area.

This swab is made of steel, with brass bowls supporting a special built red rubber cup with fabric insert. Particular features in the design of this tubing swab are to prevent stripping off or scoring the tubing. It is reported by the manufacturers to be gasoline and oil resisting.

The swab is light in weight, is equipped with swivel connection, relief valves, and offers an unusually large fluid passage.

Kibele Manufacturing Company will furnish upon request to its San Antonio headquarters, complete information on this tubing.

New Book on Oil Burning

Information of great practical value to the oil man whose work requires a familiarity with oil burning heating or power equipment is contained in the "Handbook of Oil Burning" just published by the American Oil Burner Association. In addition to authoritative information, charts, descriptive illustrations and tables relating to every phase of the oil burner industry, the book also contains a thorough treatise on oil, its courses, modern methods of refining, production, heat characteristics, comparative fuel costs, etc. A wealth of general information such as the chemistry of combustion and flame, fundamentals of heat and heat transfer, and the determination of heating capacity requirements also is included.

Printed in pocket size for convenience, the new handbook contains 629 pages including 123 tables and 358 illustrations and charts spread over 24 chapters. The price of this book is three dollars ($3.00). Orders for one or more copies will be filled by addressing letter with remittance to The Gulf Publishing Company, 3301 Buffalo Drive, Houston, Texas.

Tru-Lede Tap

GREENFIELD TAP AND DIE CORPORATION

Greenfield Tap and Die Corporation, Greenfield Massachusetts, has introduced the Tru-Lede tap for production threading, a tap designed to prevent lead error and problems of screw thread assembly. They are made from high speed steel. The permitted tolerance on Tru-Lede taps is .0005-inch in one inch of thread against .003-inch on cut thread taps.

The shanks of taps are ground concentric with the threads.

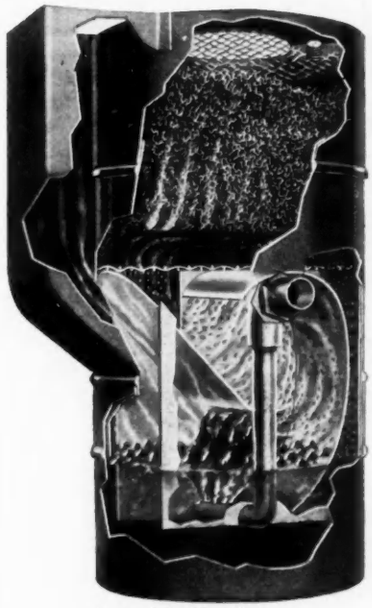
The company offers this new tap to the trade in hand, machine screw and gun styles, in all standard sizes and pitches.

United Imperial Air Cleaner

UNITED AIR CLEANER CORPORATION

United Air Cleaner Corporation 9705 Cottage Grove Avenue, Chicago, announces the United Imperial air cleaner recently developed especially for the protection of internal combustion engines used on tractors, trucks, excavators, compressors and other engine-driven equipment subject to severe dust and dirt conditions.

The new cleaner is of the oil type, a removable compartment at the bottom being provided for the oil reservoir. Immersed in the oil is a short section of slotted pipe connected to a tap on the manifold so that a small amount of the exhaust gases is by-passed to the cleaner. As soon as the engine is started, the heated gases emitted through the slot cause turbulence in the oil, with the result that the washing chamber immediately above the reservoir is completely filed with an oil spray. Outside air admitted to this chamber must pass through the spray and be deflected by a series of specially shaped baffles, the combined action of the oil spray and the baffles resulting in thoroughly washing the air and removing the dust particles. The oil-laden air then passes through a filter compartment packed with fine crimped wire, which removes the oil and completes the cleaning process.



Imperial Air Cleaner

A complete range of models is made for application to various sizes of engines. Detailed information on this new cleaner is given in Bulletin Number 101, copies of which can be obtained from the manufacturer upon request.

Manufacturer and Supply Dealer Notes

▼ ▼ ▼

Byron Jackson Company, Berkeley, California, has issued a two-color, 36-page booklet on Type "S" pumps. These pumps are single stage split casing pumps. Reproduced photographs, mechanical drawings and performance curves are carried in this booklet, with complete descriptions on Type "S" pumps. This booklet will be forwarded by the company upon request, specifying Bulletin No. 315.

Murphy Machine Company, Philadelphia, completely describes and illustrates in Bulletin No. B-200 the Murfco improved pipe coupling with the converging gaskets. These couplings are made in all sizes ranging from four to 36-inch pipe diameter, for all fluids, temperatures and pressures. They are made of forged steel, alloyed steel, bronze, or other alloys which are best adapted to the service for which they are required. The bulletin is set up in two colors to more adequately show this product. An eight-point description, giving outstanding features of the coupling, is carried in the bulletin opposite a full page illustration of the coupling, thereby giving at one view a complete outline of it. Anyone interested in learning further this pipe coupling may secure a copy of Bulletin No. B-200, by writing the manufacturers at Philadelphia.

Rollway Bearing Company, Inc., Syracuse, New York, announces the promotion of E. C. Bonistall, formerly with the engineering department of the Pennsylvania Railroad at Altoona, Pennsylvania, to manager of the Cincinnati office, in charge of Cincinnati and surrounding district sales. He has been with Rollway Bearing Company for several months, in the engineering department.

Resistcor Products, Inc., has been organized with R. D. Hardcastle as president, J. B. Heymes as vice president, and Edgar R. Pitcher as secretary-treasurer. Warehouses will be maintained at Tulsa, Houston and Memphis. Upon organization the new company purchased the coating division of Resistcor Engineering Corporation, and will sell Resistcor products to the pile line trade.

Reading Iron Company announces a number of changes in personnel in its organization, effective April 1. J. K. Aimer was appointed assistant general manager of sales, with offices at 230 Park Avenue, New York City. W. S. Shiffer was appointed to general manager of sales. R. I. Fretz has been transferred from the Reading district and will take charge of the Pittsburgh district in place of Wyman Howells, who will now direct the activities of the Reading district. Harry L. Bialock is associated with the St. Louis district under the direction of J. L. Jacobson, district sales representative. L. C. Hartzell is now under the direction of R. W. Thompson, Reading office, in the promotion of nipple business. E. S. Moorehead was appointed May 1 to the Pittsburgh district under the direction of R. I. Fretz.

Cooper-Bessemer Corporation, Mt. Vernon, Ohio, is distributing a folder which contains illustrations and specifications of the new stationary Type JT Diesel engine. Bore is 11½-inch, stroke 15-inch. Cylinders are three, four, six or eight in number. Rated horsepowers are 150-180; 200-240; 300-360; 400-480 when operating within the speed range of 300-360 r. p. m. with cast-iron pistons. Although fuel economy, trim lines, enclosure, accessibility, and option of built-in accessories are emphasized points—the most noticeable innovation is the placing of the spray valves and driving levers in a position directly below the cam shaft, easily reached from the engine platform. Removal of the engine head can thus be accomplished without disturbing the fuel injection system. Copies of the folder can be secured by writing the corporation direct.

Worthington Pump & Machinery Corporation, Harrison, New Jersey, announces the publication of specification sheet W-312-S4, four pages covering centrifugal pumps, types LA and LC, single-stage volute; sizes 16, 18, 20 and 24-inch. Specification sheet D-112-S13, one page, covers horizontal duplex double plunger steam pump, outside, end packed, pattern. It supersedes specification sheet D-252. Specification sheet W-312-S8 is devoted in four pages to centrifugal pumps, types LA and LC, single-stage volute; sizes 14, 18 and 20-inch LA; sizes 14, 18, 20, 24, 30 and 36-inch LC. Specification sheet W-312-S7 is four pages and is devoted to centrifugal pumps, types LA and LC, single-stage volute; 36 and 48-inch. Specification sheet W-312-S5, four pages, covers centrifugal pumps, types LA and LC, single stage volute; sizes 24 and 30-inch LA; 30, 42 and 54-inch LC. Specification sheet S-2001-A, superseding S-2001, covers industrial chromium plating as demonstrated by Worthington. Any of this literature is available from the company by addressing the Harrison, New Jersey headquarters.

N. M. Bush left, and Porter Lyons of Cameron, West Virginia, are seen above completely surrounded by a big "fish" which they caught with a Cameron Tool & Supply Company two-prong tong during the latter part of April.

Bush and Lyons, drillers, suffered a stranded cable at 1600 feet above the tools, which had become wedged. In trying to get loose, they broke the cable and the tools dropped 500 feet. Taking hold with a grab, they again stuck fast, after which they "hogged" out several hundred feet of the cable in short pieces.

This particular fishing job was unusual in that it was brought to a successful completion without damage to the casing.

Squeaks From the Bull Wheel

▼ ▼ ▼

Efficiency Expert—The first man to fire is that good-for-nothing loafer over there.

Owner—I'll see what I can do about it. He's my son.

And she is such a contrast to me.

Yes, I've heard she is very smart and capable.

Artist—It took me 10 years to complete that casvas.

Friend—Incredible! I can't imagine it.

Artist—I took a month to paint it and the remaining time to sell it

---

Why do you call your car "Regulator"?

Well, don't all the other cars go by it?

I didn't know you studied sign painting at college?

I didn't but I had a flivver.

There seems to be a surplus of rubber on the market now.

Then the crossword puzzle must be dying out at last.

Has opportunity ever knocked on your door?

No, but I certainly am on its mailing list.

I had my voice tried.

What was the verdict?

Fine.

Were you able to pay it?

Do you ever play cards for big stakes?

No, I'm a vegetarian.

Dad, what is the difference between a trade and a profession?

Oh, a trade is something that you begin charging for while practicing.

"What would you advise me to read after graduation?"

"The 'Help Wanted' column."

This story concerns an Omaha wholesale house and a customer merchant in an Iowa cross-roads town. A shipment of goods received by the customer was rejected as unsatisfactory.

The wholesaler prepared to institute suit for collection and wrote to the railroad agent located at the village about the arrival of the merchandise; to the president of the bank for information concerning financial standing of their customer; to the mayor of the city asking him to recommend a good lawyer to handle their case; and to the merchant himself, threatening suit, if he did not make payment at once. This reply was received:

"I received your letter telling me I had better pay up.

"I am the railroad agent here and received the letter you wrote about the s[illegible] ment.

"I am the president and sole owner of the local bank and can assure you as to my financial standing.

"As the mayor of the city, I hesitate to refer you to a lawyer, since I am the only member of the bar in this vicinity.

"If I were not the pastor of the only church here, I would tell you to go to hell."

Mrs. Brown (with newspaper)—John, it refers here to some gunmen taking a man for a ride. What kind of a ride?

Brown—A slay ride, my dear.

Mother—You know, Geoffrey, Norma is nearly 17 years old, so today I had a frank discussion with her about the facts of life.

Father—Ah! Did you learn anything new?

A girl met an old flame and determined to high-hat him. "Sorry," she murmured when the hostess introduced him to her, "but I did not get your name."

"I know you didn't," replied the old flame, "but that is not your fault. You tried hard enough."

"I'm going to the hospital tomorrow for an operation."

"Good luck to you. I hope everything comes out all right."

"What makes you say you get along well with that girl?"

"Well, she does the wrong thing at the right time."

Fair Damsel—Where do you think I'd be if a had a million dollars?

Male Escort—On my honeymoon.

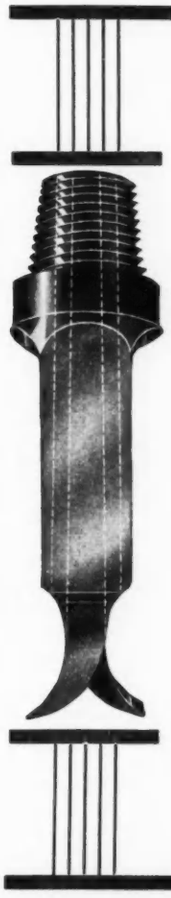
They were skating in the rink, and Lize fell down, flopped over, and came upright again in front of Rastus with remarkable agility.

"Did you see how quick Ah recovered mah equilib-ium, Rastus?

"Golly, yaas—almos' befo' Ah noticed it was uncovahed!"

Mistress (in drawing room, to friends) Yes, my maid can be relied upon not to meddle with my personal things. (As maid enters)—Mary, go and fetch me the letter from my dressing table.

Maid—Yes, ma'am. The one about your brother's wedding, or the one about the charity bazaar?



Listen, Big-boy, we're using APPLEMAN'S!

Tool Dresser: "Well, how much hole you fellers made today?"

Driller: "Aw, 'bout seventy-five feet, I reckon."

Tool Dresser: "Th' 'ell you say! An' only been in th' hole three hours? Who's doin' your bit dressin?"

Driller: "Nobody!"

Tool Dresser: "Fine! How 'bout givin' me some of your business?"

Driller: "Listen, big-boy, we're usin' APPLEMAN'S on this job . . . ***they*** don't need any dressin'!"

B. K. APPLEMAN
BEAUMONT, TEXAS

INDEX TO ADVERTISERS

J. S. Abercrombie Company .....
Acme Fishing Tool Company .....
Ajax Iron Works .....
Alamo Iron Works .....
Allsteel Products Manufacturing Co. .. 82
Alten's Foundry & Machine Works ..
American Association of Petroleum Geologists . .....
American Brake Materials Corp. 17
American Cable Company .....
American Engineering Corporation..32-33
American Hammered Piston Ring Co.
American Iron & Machine Works ....
American Meter Company .....
American Roller Bearing Company....
American Rolling Mills Company ....
American Steel & Wire Company....
American Tank & Equipment Corp. ..
The American Well Works 85
B. K. Appleman 97
C. L. & W. W. Auer .....
Axelson Manufacturing Company ....

Baker Oil Tools, Incorporated .....
Barber-Greene Company .....
Baroid Sales Company .....
William M. Barret, Inc. 84
The Barrett Company .....
The Bartlett Hayward Company.....
Beaumont Iron Works .....
Beebe Brothers .....
Black, Sivalls & Bryson .....Insert
Blackor Company .....
The Borden Company .....
Bradford Motor Works 70
Brauer Machine & Supply Company..
Bridgeport Machine Company .....
Broderick & Bascom Rope Company..
The Brewster Company 10
Buckeye Traction Ditcher Company ..
Butler Manufacturing Company .....
A. M. Byers Company 8
Byron Jackson Company .....

Calmec Manufacturing Company ....
Cameron Iron Works .....
Caterpillar Tractor Company .....
Champion and Barber, Inc. .....
Chicago Bridge & Iron Works.....
Clark Brothers Company .....
Clark Machine Company .....
The Continental Supply Company ....
Fred E. Cooper Company .....
The Cooper-Bessemer Corporation ... 4-5
The Corbett Corporation .....
Cyclone Fence Company .....

Industrial Dallas, Inc. .....
Darling Valve & Manufacturing Company . .....Third Cover
E. M. Dart Manufacturing Company.. 83
Dayton Rubber Manufacturing Co....
Donovan Boiler Works .....
Driftmeter, Inc. .....
S. R. Dresser Manufacturing Company

The Economy Pump & Oil Tools Co.
E. H. Edwards Company .....
Elliott Core Drilling Company .....

Fort Worth Laboratories 84
Franklin Valveless Engine Company .. 9
Frick-Reid Supply Corporation .....

Garland Wagon Company .....
Gaso Pump & Burner Manufacturing Company 3
Gates Rubber Company .....
General Electric Company .....
Globe Oil Tools Company .....
H. P. Gott Manufacturing Company ..
Granger Indicator Company .....
Grant Oil Tool Company .....
Gray Tool Company .....
The Guiberson Corporation 55
Gulf Coast Machine & Supply Company 82
Gulf Publishing Company .....
Gulf Refining Company 14
Gulf States Utilities Company .....

Halliburton Oil Well Cementing Co...
Hardway & Cathey 84
Hart Brothers Machine Company ....
Haynes Stellite Company .....
Hazard Wire Rope Company .....
C. M. Heeter & Sons Company .....
Hercules Tool Company .....
Hewitt Gutta-Percha Rubber Corp...
Heydrick Mapping Company 84
Hinderliter Tool Company .....
Hirsch, Brown & Susman 84
Hopper Machine Works, Inc. 11
The Charles N. Hough Manufacturing Company . .....
Houston National Bank .....
Houston Oil Field Material Co. .....
Houston Ready-Cut House Company.. 85
Hughes Tool Company ....Fourth Cover
Hyatt Roller Bearing Company .....

Industrial Dallas, Inc. .....
Ingersoll-Rand Company .....
The International Derrick & Equipment Company .....
International Harvester Company ....

Byron Jackson Company .....
Jarecki Manufacturing Company .....
Jenkins Brothers .....
Jensen Brothers Manufacturing Co.... 83
The S. M. Jones Company .....
Jones & Laughlin Steel Corporation..

Larkin Packer Company .....
The Layne & Bowler Co. .....
Layne & Bowler, Inc. .....
A. Leschen & Sons Rope Company....
The Lincoln Electric Company .....
The Linde Air Products Company ...
Litterst Commercial Photo Company.. 84
Lowell Wrench Company .....
Lucey Products Corporation .....
Lufkin Foundry & Machine Company.. 31

MacClatchie Manufacturing Company.. 16
D. S. Mair Machinery Corporation ...
Martin-Decker Corporation .....
Martin Wagon Company .....
McCollum Exploration Company..... 84
J. H. McEvoy & Company 92
Maloney Tank Manufacturing Company
Merchant-Thayer & Company .....
Metric Metal Works .....
Miller Sand Pump Company .....
Lee C. Moore & Company ..Front Cover
I. P. Morris & DeLaVergne, Inc. ....
Multibestos Company .....

National Supply Companies 35
National Tank Company .....
National Transit Pump & Machine Co. 53
National Tube Company .....
Naylor Pipe Company .....
Oakite Products, Incorporated .....
O'Brien Steel Construction Company
Oil Center Tool Company .....
Oil Well Supply Company 20

Page Steel & Wire Company .....
Parkersburg Machine Company 84
The Parkersburg Rig & Reel Company 6
Patterson-Ballagh Corporation 13
Pelican Well Tool & Supply Co. ....
Petroleum Equipment Company .....
Petroleum Rectifying Company .....
Picadilly Hotel .....
Pittsburgh Screw & Bolt Corporation
Pittsburgh Steel Products Company.. 42
Pratt & Whitney Company .....
Price & Trawick, Inc. 12
Pyrene Manufacturing Company .....

J. P. Ratigan .....
Reading Iron Company .....
Regan Forge & Engineering Company
Reed Roller Bit Company 37-38-39-40
Republic Steel Corporation .....Insert
Republic Supply Company .....
Robertson McDonald Lumber Co. ....

Second National Bank .....
Shaffer Tool Works .....
SKF Industries, Inc. .....
A. O. Smith Corporation .....
Howard Smith Company .....
South Chester Tube Company .....
Southern Engine & Pump Company ..
Southern Pacific Lines .....
Spang Chalfant & Company .....
Specialty Oil Tool Company .....
Spengler Tool Company .....
Sperry-Sun Well Surveying Company.. 12
Star Drilling Machine Company .....
Jesse R Stone and Lester B. Clark .. 84

Texas Blue Print & Supply Company
Texas Cyclone Fence Company.....
Texas Electric Steel Casting Company
Texas Electric Service Company .....
Texas Iron Works .....
Thermoid Rubber Company .....
The Thrift Corporation .....
The Timken Roller Bearing Company 7
Tretolite Company 15
Trimont Manufacturing Company ...
Trumble Gas Trap Company .....
The Tyler Tube & Pipe Company ....

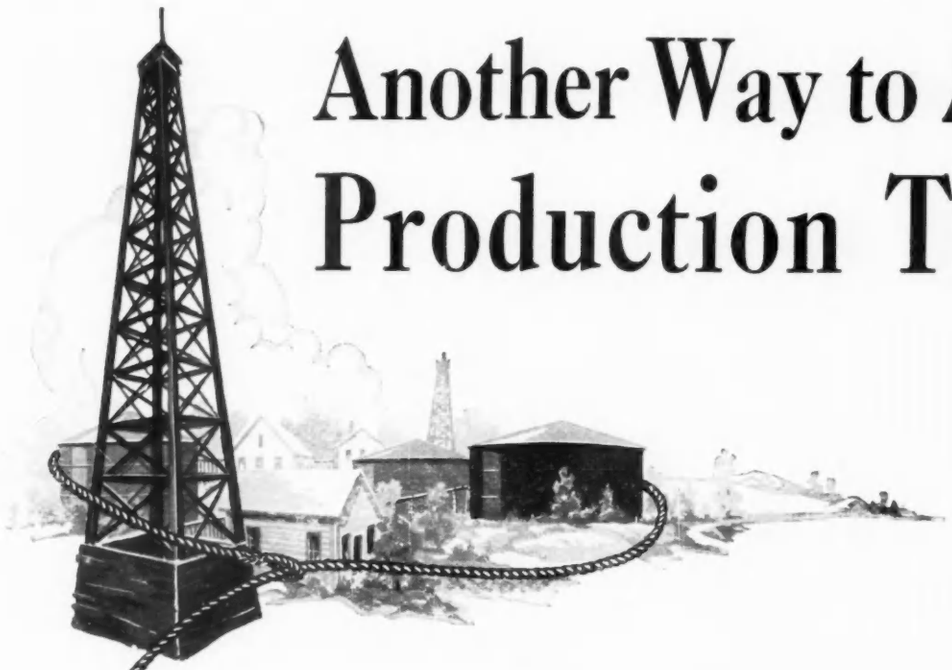
Union Wire Rope Corp...Second Cover
United Gas Company .....

Westcott Valve Company .....
Westinghouse Electric and Manufacturing Company . .....
Walworth Company .....
Wickwire-Spencer Steel Company ....
Wico Electric Company .....
Williamsport Wire Rope Company ..
J. H. Williams & Co. .....
Wilson Supply Company .....
W-K-M Company .....
Wright Manufacturing Company ....

Youngstown Sheet & Tube Company

Every precaution has been taken to insure accuracy in listings in this Index to Advertisers, but last minute changes may result in omissions or erroneous listings for which we ask your indulgence. This index is for the convenience of readers and we do not assume liability for improper listings.

Another Way to Avoid a Production Tie-Up



There are so many hostile elements conspiring to choke off production that it is well nigh impossible to guard against them all. However, there is little reason to put up with troublesome valves. This source of delay and expense is removed and forgotten when Darling Gate Valves are installed.

They have everything in their favor—strength, simplicity of construction, ease of operation and long-wearing parts. They have ample clearance through the seats against injury by tools, pipe, etc., passing through the valve.

Further details on request.

Darval Semi-Steel Drilling Gate Valve Made in all sizes for all pressures.

Darling Forged Steel Drilling Gate Valve for extra high pressures and other hazardous conditions.

Darling Valve & Mfg. Co.

WILLIAMSPORT, PA.

New York Los Angeles Oklahoma City Houston

Mid-Continent Distributors:

Frick-Reid Supply Corp. International Supply Co.

Foreign Sales Manager:

H. M. HEIN

Room 1405, 152 West 42nd Street, New York, N. Y.

DARLING

GATE VALVES

for SAFETY INSURANCE

Sold by Supply Stores —Everywhere

Hughes VALVES & TUBING HEAD

In this day of deep drilling and high pressures, Operators, Contractors and Drillers throughout oil fields of the world are giving more attention to their selection of tools and equipment—stressing the qualities of safety as well as performance.

Because of design, material, skilled workmanship and complete tests, Hughes Valves and fittings and the Hughes (Brown) Tubing Head offer the maximum degree of safety and flexibility in handling the production of even the highest pressure wells.

The Hughes (Brown) Safety Tubing Head allows the closing of the master gate while the tubing is in the well so that all or any part of the Christmas Tree or fittings may be changed or repaired, and the well put back on production without having to kill the pressure with mud.

Hughes Valves, through the close precision of their working parts, close grained strength of their chrome nickel steel and positive closure under all working conditions have established a new standard of valve performance throughout the industry.

HUGHES TOOL COMPANY

Service Plant
Los Angeles, Calif.
Oklahoma City, Okla.
Midland, Texas

Main Office and Plant
HOUSTON,
TEXAS

Export Offices
Woolworth Building
New York City